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GEOLOGICAL SURVEY OF GEORGIA

S. W. McCALLIE, State Geologist

BULLETIN No. 16

SECOND REPORT

ON THE

WATER POWERS

OF

GEORGIA

BY

B. M. HALL AND M. R. HALL

CO-OPERATIVE WORK OF THE GEOLOGICAL SURVEY OF GEORGIA
AND THE UNITED STATES GEOLOGICAL SURVEY

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LETTER OF TRANSMITTAL

GEOLOGICAL SURVEY OF GEORGIA,
ATLANTA, July 7, 1908.

To His Excellency, HOKE SMITH, *Governor and President of the Advisory Board of the Geological Survey of Georgia.*

SIR: I have the honor to transmit herewith a report on the Water Powers of Georgia to be published as Bulletin No. 16 of this Survey. This is the second bulletin which has been issued by the Survey on this very important subject; and, like the first report, Bulletin No. 3, is the result of co-operative work between the State Geological Survey and the United States Geological Survey. The report is, in a large measure, a reprint of Water-Supply and Irrigation Paper No. 197, entitled the Water Resources of Georgia, published by the United States Geological Survey in 1907, with the addition of considerable data subsequently collected. I would here add that the manuscript copy of this bulletin was submitted to this Survey by the Hall Brothers in 1905 at the same time a copy was furnished the United States Geological Survey; but, owing to the ill health of my predecessor, its publication has been delayed until the present.

Very respectfully yours,

S. W. MCCALLIE,
State Geologist.

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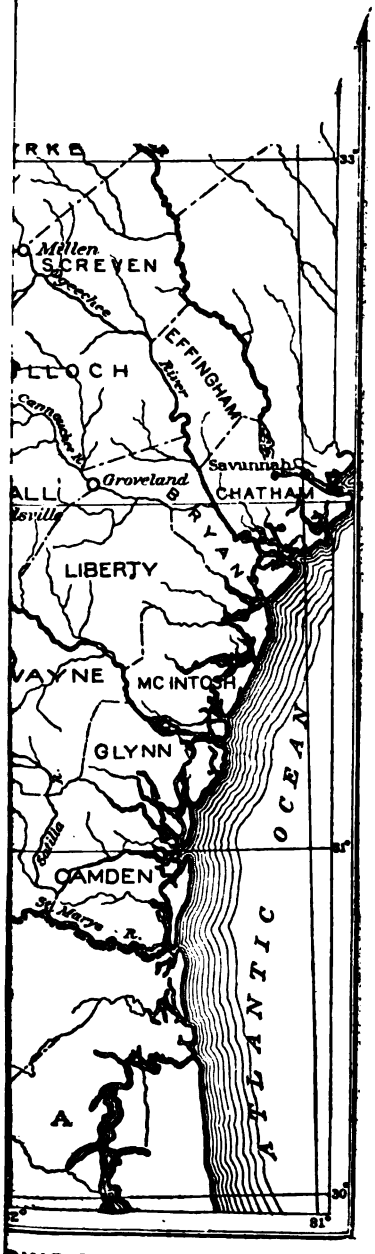

GING STATIONS

Water Powers of Georgia

TOPOGRAPHY AND GEOLOGY

GENERAL FEATURES

A systematic study of the water powers of the State requires a knowledge of the drainage systems, which are somewhat intricate.

The topography of the State is peculiar. Chattahoochee Ridge, which runs from the northeast corner of the State in a southwesterly and southerly direction through Gainesville, Atlanta, Griffin, Fort Valley, Fitzgerald, and through the Okefenoke Swamp to the Florida line, divides the waters of the Atlantic Ocean from the waters of the Gulf of Mexico and forms the backbone of the State. The great drainage basins on the Atlantic slope are the Savannah, the Ogeechee, the Altamaha, the Satilla, and the St. Marys. Those draining into the Gulf are the Suwanee basin, including Suwanee River and tributaries; the Ochlockonee basin, emptying into Ochlockonee Bay; the Apalachicola basin, including Chattahoochee and Flint Rivers, emptying at Apalachicola, Florida; the Mobile basin, or Coosa River system, draining to Mobile, Alabama; and the Tennessee basin, including Hiawassee, Nottely, and Toccoa (Ocoee) Rivers, which flow throughTennessee and Mississippi rivers, emptying into the Gulf at New Orleans. The last basin is cut off from all the others by the Blue Ridge Mountains, which run across the northern end of the State. Some idea of the diversity of drainage may be had from the statement that there are three springs in northeast Georgia within a stone's throw of each other that send out their waters to Savannah, Georgia, to Apalachicola, Florida, and to New Orleans, Louisiana.

The streams of the Savannah, Altamaha, Apalachicola, Mobile, and Tennessee basins begin in, and have a large part of their territory lying in, the crystalline or granitic region, which is all that part of the State lying north of the southern fall line, and east of the western fall line. The streams of these drainage basins rise at ele-

vations from 900 to 2,000 feet above sea-level and flow along the high Piedmont Plateau in a succession of cascades until they come to the fall line, where they take their last leap from the granitic bed rock to the navigable waters of the younger geologic formations.

The southern fall line passes through Augusta, Milledgeville, Macon, and Columbus, and marks the ancient Atlantic coast line and the present division between the crystalline and Cretaceous geologic formations. Along this line, which is practically parallel to the Blue Ridge Mountains, the Cretaceous lies unconformably upon gneiss, the surface of which slopes toward the sea at a steep angle, and gives unmistakable evidence of having formed at one time a barren rocky seacoast similar to that of Massachusetts.

The western fall line passes through Carters on Coosawattee River and Cartersville on Etowah River and marks the ancient coast line of the Gulf of Mexico or Paleozoic Sea and the present division between the Crystalline and Paleozoic geologic formations. The conditions along this fall line have no similarity to those along the southern fall line. The formations, both crystalline and Paleozoic, have been wrinkled, folded, and faulted by lateral pressure to such an extent that no contact slope exists between the two formations along which percolation could take place. Etowah River below Cartersville shows a hard blue limestone bed rock, out of which many bold springs flow into the river, and while the best shoal on the river is at Cartersville in the crystalline bed rock just above the fall line, the river is a series of shoals all the way down to Rome, where it unites with the navigable Oostanaula to form Coosa River.

The western fall line crosses the Coosawattee in Murray county at Carters, which is the head of navigation. The country along the Coosawattee below Carters is mainly a pervious shale that drinks up most of the smaller streams in driest weather. Although very large limestone springs having a good flow at all seasons abound, yet during long dry spells the streams from most of them become smaller and smaller as the distance from the fountain head increases, and finally soak into the ground and disappear.

From the foregoing discussion it will be seen that the largest and most important water powers of the State are in the crystalline area north of the southern fall line and east of the western fall line. It will be convenient, therefore, in this discussion to divide the State

hydrographically into three areas: (1) The crystalline area in Middle and Northeastern Georgia as above defined; (2) the Paleozoic area in Northwest Georgia, and (3) the coastal plain lying south of the southern fall line and embracing more than half the State.

THE CRYSTALLINE AREA

The crystalline area embraces the Blue Ridge Mountain region, with elevations from 1,000 to 4,800 feet above sea-level, and the Piedmont Plateau, with elevations from 600 to 1,600 feet above sea-level. The rivers of the Piedmont Plateau in this region rise at very high altitudes and flow over granite, gneiss, etc., with precipitous falls in succession of shoals and eddies, between high hills, affording excellent sites for dams and canals, and are peculiarly adapted to the development of high-head water powers, with a good and constant water supply. The following table shows the fall on the main rivers that cross the fall lines in the State:

Fall on Georgia rivers.

River	Distance	Fall
	Miles	*Feet*
Savannah, above Augusta	64	257
Oconee, above Milledgeville	54	211
Ocmulgee, above Macon	50	219
Flint, above fall line	45	334
Chattahoochee, above Columbus	35	368
Etowah, above Cartersville	17	118
Coosawattee, above Carters	24	583

The above table gives an idea of the fall to the mile on the main rivers of the lower part of the Piedmont Plateau. The upper sections of these streams and of their tributaries are even more precipitous. Some shoals on tributaries are as follows:

Broad River, 63 feet in 2 miles.

Tallulah River, 525 feet in 2⅔ miles.

Towaliga River, 96 feet in 1,200 feet.

Neither the rivers nor their tributaries have any regularity in fall; it is concentrated in shoals over hard ledges of granite or gneiss, with long stretches of gentle flow between. These streams will be considered in detail in the body of this report, and each shoal of importance will be mentioned.

THE PALEOZOIC AREA

The Paleozoic area lies from 400 to 1,000 feet above sea level. The only river in it with much fall is the Etowah, which at Cartersville crosses the fall line from crystalline bed rock to limestone. Between this point and Rome the shoals are caused by harder limestone ledges, the total fall being 109 feet in 46 miles. The tributaries of this river, together with those of the Conasauga, Oostanaula, Coosa, and Tennessee, furnish a large number of small water powers that are valuable for local enterprises, as they are mainly in rich agricultural districts. The entire area abounds also in large springs that can be relied on to furnish a pure and unfailing water supply for municipal and industrial purposes.

THE COASTAL PLAIN

The elevation of the Coastal Plain varies from tide water up to 500 feet above sea level. The large rivers from the crystalline belt cross the southern fall line into this area at the following elevations above sea level:

Elevation of rivers at southern fall line.

	Feet
Savannah, at Augusta	98
Oconee, at Milledgeville	215
Ocmulgee, at Macon	280
Flint, at fall line	327
Chattahoochee, at Columbus	190

Four of these rivers are rated as navigable streams below the points mentioned. The Savannah and Chattahoochee have regular steamboat lines to these points, but the Oconee and Ocmulgee will require considerable Government work before they can be navigated to Milledgeville and Macon, respectively. Flint River is shoaly all the way to Albany. It is the only one of these rivers that can be counted on for any water power in this area, but on smaller streams there are hundreds of good powers well distributed, many of which are already developed for local uses.

This part of Georgia is developing more rapidly as an agricultural and fruit-raising region than is any other part of the State. Its pine forests are still a great source of wealth, but land that has yielded its

full crop of turpentine and timber is proving more valuable for cotton, corn, watermelons, cantaloupes, pecans, pears, peaches, garden vegetables, and Georgia cane sirup. The climate is mild and healthful, the streams are bold and constant, and the supply of artesian water is abundant and of the best quality.

USES OF WATER

IRRIGATION.

In the arid region of the Western States, where the rainfall is not sufficient or is not properly distributed through the year for making crops, the most important use of water is for irrigation. In Georgia and other Southern and Eastern States the rainfall is much greater and more evenly distributed through the year, but, nevertheless, the lack of rain at the proper time often cuts a crop to one-half or one-third what it would have been with one additional wetting at the time most needed. Thus a small amount of water in storage and ready for use will do more good in the East, where it has the help of frequent rains through a large part of the crop season, than will a much greater amount of water in the arid West, where artificial irrigation must be depended on exclusively.

Market gardening is one of the most attractive and most profitable agricultural pursuits in the South, but irrigation is almost a necessity for making the business a safe one. In any event, it can be relied on to double the yield of one crop and to enable the gardener to make from two to three crops on the same land in the same year. In Georgia the gardening season is ordinarily from February to July, but with irrigation it can be extended to November and even later. In Florida the gardening season is in winter, from November to April. This is the dry season, but the planters irrigate from flowing artesian wells and ship celery, lettuce, and other vegetables all winter. This system is being rapidly introduced in southern Georgia.

Artesian wells are the ideal source of water for individual irrigation plants where they can be had at small expense and where the supply is sufficient.

Gravity systems by means of storage dams and canals are more extensive in their application and are practicable on the lowlands of

river and creek valleys having adjacent hill country from which tributaries flow at a higher elevation. These tributaries can be impounded by large storage dams, and small canals can be cut along the hillsides near the foot of the hills to furnish water for irrigating the lowlands. A small stream, properly stored, can be made to irrigate a large area in this way, as one good wetting at the proper time is all that a crop is likely to need.

Hydraulic rams, which are now manufactured of large capacity, can be relied on for pumping water to any desired elevation for irrigating high lands. Some plants of this kind are now in use in Georgia and are giving good results. The water is pumped up by the ram into a large reservoir excavated on a clay hill or made by a dam in a high ravine. The water thus accumulated for months is held until needed and is run through open ditches onto the fields below the reservoir level. A small stream having a flow of 80 gallons a minute and a fall of 20 feet will operate a ram that will pump 15,000 gallons a day to a height of 100 feet above the ram. This amount of water, stored as suggested, will furnish all necessary irrigation to 10 or 12 acres in this State.

A ram of this size takes its water through a 4-inch drive pipe. Rams are made in all sizes, from a 1-inch ram using 3 gallons a minute to a duplex 12-inch ram using two 12-inch drive pipes and a water supply of 1,500 gallons a minute. One of the latter placed on a stream having a flow of 1,500 gallons a minute, which is a very small creek, will utilize a shoal of 20 feet and pump 288,000 gallons a day to a height of 100 feet above the ram. Such creeks are found in all parts of the crystalline region and are plentiful in the hilly parts of the Paleozoic area and of the Coastal Plain. Any amount of fall from 4 feet up to 40 feet can be utilized, the amount of water pumped being directly as the drive head and inversely as the lift. These improved rams open up great possibilities for cheap water supply. Their first cost is very moderate, and they pump by water power, requiring no attendant.

Near the coast, where the streams have very little fall, the agricultural lands are on a low level, from 5 to 15 feet above the streams, and the supply of pine wood for fuel is abundant. Under these conditions centrifugal steam pumps can be run very economically to give abundant water for irrigation.

USE OF WATER FOR DOMESTIC PURPOSES AND MUNICIPAL SUPPLY

Pure drinking water is abundant in all parts of the State. In north and middle Georgia it is obtained from wells, springs, and pure streams. Farther south the best supply is from artesian wells. Most of the large cities of north and middle Georgia get their supply from rivers. Atlanta uses filtered water from the Chattahoochee; Augusta from the Savannah; Macon from the Ocmulgee, and other cities of the region from rivers or local creeks. Savannah, Albany, Americus, Thomasville, Dublin, and other south Georgia municipalities get their supply from artesian wells. In country and suburban communities hydraulic rams are largely used for dairy farms and other domestic supplies. There are also many gravity systems in the mountains and artesian wells in the coastal plain.

USE OF WATER FOR INDUSTRIAL PURPOSES

The supply of water for mining, quarrying, manufacturing, steam making, etc., is very important.

Gold mining is a great industry in the State, and water is largely used for hydraulic work in placers and also in saprolite belts. In the latter class of mining, the water excavates and transports the material in long flumes, automatically depositing the loose gold in the sluice riffles, separating the slate, clay, and slimes from the quartz, and landing the concentrated ore in the mill, where it is crushed by stamps. The free gold is amalgamated on copper plates, and the auriferous iron sulphides are saved on a concentrator and reduced by chlorination and precipitation of the gold. All of these processes require large quantities of water. In the Dahlonega region water for hydraulic mining is brought long distances in open canals along the hillsides and hilltops. Some of these canals are 40 miles and more in length and have cost many thousands of dollars. One of the most famous is the Yahoola ditch from the upper waters of Yahoola Creek. It is 20 miles long from its head to the town of Dahlonega and has supplied mines through branch ditches 10 and 15 miles in length. It carries from 500 to 1,000 miners' inches of water, and water has been sold from it for many years at 12 cents per miner's inch per day. A miner's inch, Colorado standard, is

11¼ gallons, or 1½ cubic feet per minute, or one-fortieth of a cubic foot per second.

In a large part of the extensive gold regions of the State the mining is underground work in which water is not used for excavation, but a large amount of battery water is used in the mills, and an additional supply is needed for the concentrators.

Water is also used extensively in the washing and concentrating processes of iron, manganese, ocher, barytes, pyrites, corundum, asbestos, bauxite, and other minerals.

Quarrying industries require a good water supply, both for making steam and for operating rock drills. The marble quarries near Tate, Marble Hill, and Ball Ground, in Pickens County; the granite quarries at Stone Mountain, Lithonia, Conyers, Lexington, Elberton, and other points; the National Cement Quarries at Cement, Georgia, near Kingston; the slate and limestone quarries of the Southern States Portland Cement Company at Rockmart; and other quarries throughout the State are operated on a large scale.

Immediately allied with the quarrying industry are the great marble manufacturing mills at Tate, Marble Hill, Nelson, Ball Ground, Canton, and Marietta for sawing and finishing marble. The sawing and rubbing is done with sand and water, requiring a good water supply. Aside from the water required for power, there are many manufacturing industries, such as paper making and bleacheries, that can not be operated without pure water and a great deal of it.

There are many large springs in the Paleozoic region of northwest Georgia and also in the Coastal Plain of south Georgia that are clear and sparkling and excellent for drinking purposes, but that contain carbonates of lime and magnesia in solution, either of which is objectionable in a water to be used in chemical purposes such as bleaching; if present in large quantities they even render the water unfit for steam boilers, as they deposit incrustations of lime and magnesia on the inside of the boiler. The springs of the crystalline region of middle and northeast Georgia are generally pure, containing no carbonates and a very insignificant amount of the other mineral ingredients, but in the greater part of this area the springs are small, rarely having a flow of more than 10 or 15 gallons a minute. The exception to this rule is a belt of country within the crystalline

region, running nearly east and west along the pine mountain range in Pike, Upson, Meriwether, Talbot, and Harris Counties, in which there are large springs of pure freestone water, suitable both in quantity and quality for bleacheries, fish hatcheries, etc. One of the largest of these is the Cold Spring in Meriwether County, at Bullochville, about 1 mile below Warm Springs, Georgia, on the Georgia Midland division of the Southern Railway. It has a flow of 2,025 gallons per minute, and is utilized as a fish hatchery by the United States Fish Commission. It issues from a ledge of vitrified sandstone, which is continuous through the entire region, and forms the backbone of the pine mountain range, which is geologically the coast range of Georgia. Warm Spring, about 1 mile distant, has a flow of 1,890 gallons a minute, but is evidently of a much deeper origin, as its temperature is 87° Fahrenheit. There are many other springs of the same character as Cold Spring along the pine mountain belt, one of the most prominent of which is Big Blue Spring, in Harris County, which has been proposed as a water supply for the city of Columbus.

In other parts of the State probably one of the best sources of pure, clear water for chemical use is found in the gravel beds underlying the river bottom land. These gravel beds lie immediately on the bed rock and can generally be relied on to furnish a good supply of water that has been clarified by a natural filter.

WATER SUPPLY OF STREAMS[a]

MEASUREMENT OF FLOW

In order to obtain a knowledge of the water supply, or amount of water flowing in the streams at all seasons, certain convenient stations have been established on important rivers and tributaries.

A gage for observing the stage of the river is established at a bridge or other place where the record of flow is to be made. This gage is a vertical staff, or some other device by which the height of water may be observed, and is read each day by a person living near by. The average of the gage readings, if more than one, in any day is used as the mean gage height for that day.

a The methods by which the records of stream discharge have been made by the United States Geological Survey are described in detail in Water-Sup. and Irr. Papers Nos. 94 and 95.

At various stages of the river one of the hydrographers of the Survey visits the station and measures with a current meter the amount of water flowing. This meter is primarily an instrument for measuring the velocity of moving water, and consists essentially of a wheel with vanes, which may be shaped like those of a windmill or of a screw, or with cups like those of an anemometer, the necessary qualification being that moving water shall readily cause the wheel of the meter to turn. Each meter is rated before use. The rating is done by moving the meter through still water at various observed speeds to determine the relation between the velocity with which the meter moves through the water and the revolutions of the wheel. This relation having been determined, the meter is used in running water, the revolutions per unit of time noted, and the velocity of the water computed.

Observations of depth of water are also made, and from them the area in cross section of each portion of the stream is computed; each partial area multiplied by the mean velocity of that area gives a partial discharge; the sum of the partial discharges is the total discharge of the stream.

Measurements of flow as outlined above are made covering a considerable range of gage height. They are then plotted on coordinate paper, with gage heights for ordinates and discharges for abscissas, and a smooth curve, called the rating curve, is drawn through the points. From this curve a rating table is made which shows the discharge of the stream for any gage height.

The data necessary for the construction of a rating table for a gaging station as just stated are (1) the results of the discharge measurements, which include the record of stage of the river at the time of measurement, the area of the cross section, the mean velocity of the current and the quantity of water flowing, and (2) a thorough knowledge of the conditions at and in the vicinity of the station.

The construction of the rating table depends on the following laws of flow for open permanent channels: (1) The discharge will remain constant so long as the conditions at and near the gaging station remain constant; (2) neglecting the change of slope due to the rise and fall of the stream, the discharge will be the same when-

ever the stream is at a given stage; (3) the discharge is a function of, and increases gradually with, the stage.

The plotting of results of the various discharge measurements, using gage heights as ordinates, and discharge, mean velocity, and area as abscissas, will define curves which show the discharge, mean velocity, and area corresponding to any gage height. For the development of these curves there should be, therefore, a sufficient number of discharge measurements to cover the range of the stage of the stream.[a]

As the discharge is the product of two factors, the area and the mean velocity, any change in either factor alone will produce a corresponding change in the discharge. Their curves are therefore constructed in order to study each independently of the other.

The area curve can be definitely determined from accurate soundings extending to the limits of high water. It is always concave toward the horizontal axis or on a straight line, unless the banks of the stream are overhanging.

The form of the mean-velocity curve depends on the surface slope, the roughness of the bed, and the cross section of the stream. Of these the slope is the principal factor.

This curve may be a straight line, or a curve either convex or concave, or may be a combination of these three forms, owing to the relative degree to which any of the factors are present or to the change which they undergo during the change of gage height. A careful study of the conditions at a gaging station makes it possible to predict the form of this curve and to extend it beyond the limits of the actual measurements.

The discharge curve is defined primarily by the measured discharges, and when these do not cover the entire range of gage height for which it is desired to make a rating table, the curve is sometimes extended by the use of the area and mean-velocity curves, which have themselves been extended, as above shown. This curve, under normal conditions, is concave toward the horizontal axis and is generally parabolic in form.

In preparing the rating table the discharge for each tenth on the

a A typical rating curve with corresponding area and mean velocity curves is given; in Water Supply and Irrigation Paper No. 168, 1906, p. 17.

gage is taken from the curve, and the differences between successive discharges are then adjusted according to the law that they shall be either increasing or constant. The finished rating table shows the discharge in cubic feet per second, corresponding to each tenth of a foot on the gage, and is used to supply the discharge values to the daily gage heights furnished by the observer in making up the daily or monthly estimate of flow.

DEFINITIONS

The volume of water flowing in a stream, the "run-off," is expressed in various terms, each of which is associated with a certain class of work. These terms may be divided into two classes: Those which represent a rate of flow, as second-foot, gallons per minute, and run-off in second-feet per square mile, and those which represent actual quantities of water, as run-off in depth in inches. They may be defined as follows:

"Second-foot" is an abbreviation for cubic foot per second and is the quantity of water flowing in a stream 1 foot wide, 1 foot deep, at the rate of 1 foot per second. It is generally used as a fundamental unit from which the others are computed.

"Gallons per minute" is generally used in connection with pumping and city water supply.

"Second-feet per square mile" is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the run-off is distributed uniformly both as regards time and area.

"Run-off in inches" is the depth to which the drainage area would be covered if all the water flowing from it in a given period were conserved and uniformly distributed over the surface. It is used for comparing run-off with rainfall, which is usually expressed in depth in inches.

EXPLANATION OF TABLES

For each regular station are given, as far as available, the following data:

1. Description of station.
2. List of discharge measurements.
3. Gage-height tables.
4. Rating tables.

5. Tables of estimated monthly and yearly discharges and run-off, based upon all the facts available to date.

The descriptions of stations give such general information about the locality and equipment as would enable the reader to find and use the station. They also give, as far as possible, a complete history of all the changes that have occurred since the establishment of the station that would affect the use of the data collected.

The discharge-measurement table gives the results of the discharge measurements made during each year, and includes the date, the gage height, and the discharge in second-feet.

The table of daily gage heights gives for each day the mean height of the surface of the river, as found from the mean of the gage readings taken on that day.

The rating table gives discharges in second-feet corresponding to each stage of the river, as given by the gage-heights.

In the table of estimated run-off the column headed "Maximum" gives the mean flow for the day when the mean gage height was the highest, and it is the flow as given in the rating table for that mean gage height. As the gage height is the mean for the day, there might have been short periods when the water was higher and the corresponding discharge larger than given in this column. Likewise, in the column of "Minimum," the quantity given is the mean flow for the day when the mean gage height was lowest. The column headed "Mean" gives the average flow for each second during the month. Upon this mean the computations for the remaining columns are based.

GAGING STATIONS IN GEORGIA

The gaging stations maintained in Georgia are listed below:

Tallulah River at Tallulah Falls.
Tugaloo River near Madison, S. C.
Savannah River near Calhoun Falls, S. C.
Savannah River at Woodlawn, S. C.
Savannah River at Augusta.
Broad River (of Georgia) near Carlton.
Broad River (South Fork) near Carlton.
Ogeechee River near Millen.
Williamsons Swamp Creek at Davisboro.
Chattahoochee River near Norcross.
Chattahoochee River near Vinings.
Chattahoochee River at Oakdale.
Chattahoochee River at West Point.
Soque River near Demorest.
Sweetwater Creek near Austell.
Mulberry Creek near Columbus.
Flint River at Molina.
Flint River near Woodbury.
Flint River near Montezuma.
Flint River at Albany.
Big Potato Creek near Thomaston.

Cannoochee River near Groveland.
South River near Lithonia.
South River near Snapping Shoals.
Ocmulgee River near Flovilla.
Ocmulgee River at Macon.
Yellow River near Stone Mountain.
Yellow River at Almon.
Alcovy River near Covington.
Alcovy River near Stewart.
Towaliga River near Juliette.
Middle Oconee River near Athens.
Oconee River at Barnett Shoals.
Oconee River near Greensboro.
Oconee River at Carey.
Oconee River at Fraleys Ferry, near Milledgeville.
Oconee River at Milledgeville.
Oconee River at Dublin.
Apalachee River near Buckhead.
Ohoopee River near Reidsville.
Chattahoochee River near Cornelia.
Chattahoochee River near Gainesville.
Chattahoochee River near Buford.
Muckalee Creek near Leesburg.
Muckalee Creek near Albany.
Kinchafoonee Creek near Leesburg.
Kinchafoonee Creek near Albany.
Ichawaynochaway Creek at Milford.
Etowah River near Ballground.
Etowah River at Canton.
Etowah River at Rome.
Etowah River near Rome.
Amicalola River near Ballground.
Long Swamp Creek near Ballground.
Coosa River at Rome.
Oostanaula River at Resaca.
Coosawattee River at Carters.
Cartecay River near Cartecay.
Ellijay River near Ellijay.
Mountaintown Creek near Ellijay.
Talking Rock Creek near Carters.
Big Cedar Creek near Cavespring.
Tallapoosa River at Buchanan Bridge, near Tallapoosa.
Tallapoosa River at Adderhold Bridge, near Tallapoosa.

SAVANNAH RIVER DRAINAGE BASIN

DESCRIPTION OF BASIN

Savannah River is formed by the junction of Tugaloo and Seneca rivers, which unite about 100 miles above Augusta, Georgia. It flows in a southeasterly direction, forming the boundary between Georgia and South Carolina, and empties into the Atlantic Ocean near Savannah, Georgia. It is navigable up to Augusta, which is at the fall line.

Seneca River is formed by the junction of Little and Keowee rivers, about 5 miles northeast of Seneca, South Carolina. Both of these tributaries rise in the Blue Ridge in North Carolina and the northwestern part of South Carolina.

Tugaloo River is formed by the junction of Chattooga and Tallulah rivers, which join at the western corner of Oconee County, South Carolina. It flows in a southeasterly direction and is a part of the boundary between Georgia and South Carolina. Chattooga River rises in Jackson County, North Carolina, and flows in a southwesterly direction along the boundary between Georgia and South

Carolina. Tallulah River rises in Macon County, North Carolina, and in the northwestern part of Rabun County, Georgia, and flows in a southeasterly direction. Parts of its course are cut through the solid rock for hundreds of feet, forming canyons and steep bluffs. Throughout its entire length the fall is very great, and at Tallulah Falls the stream drops more than 500 feet in a short distance.

Broad River joins the Savannah at the southeast corner of Elbert County, Georgia. It rises in Habersham and Banks counties and flows in a southeasterly direction to the southeast corner of Madison County, Georgia, where the South Fork joins it. From there it flows east to Savannah River. Its drainage is from a rolling country, and there is a considerable amount of fall at various points. At Anthony Shoals the fall is more than 50 feet in a short distance. Above Augusta, Georgia, there is much fall, which can be developed for water power. Except at the large plant at Augusta, very little of this is being used.

STREAM FLOW

TALLULAH RIVER AT TALLULAH FALLS

This station was originally established August 29, 1900, by M. R. Hall, and records of gage heights were obtained until October 19, 1900. The record was resumed January 18, 1901, and maintained until December 31, 1901. The station was reestablished July 10, 1904, when bench marks were determined and regular gage readings begun. The station is located at the wagon bridge about one-fourth mile above the falls and about the same distance from the village of Tallulah Falls, Georgia.

The channel is nearly straight for 300 feet above and 200 feet below the station. The current is swift. Both banks are high, wooded, rocky bluffs and are not subject to overflow. The bed of the stream is composed of rock and is rough and permanent. There is but one channel at all stages.

Discharge measurements are made from the iron wagon bridge, which has a single span of 100 feet and rests on timber piers. The initial point for soundings is the end of the bridge on the upstream side at the left bank.

The original gage is a vertical rod spiked to a small maple tree on

the left bank of the river about 50 feet above the bridge. June 21, 1905, a 5-foot rod gage was fastened vertically to the solid rock on the right bank 25 feet above the bridge. The datum is the same as that of the original gage. The gage is read once each day by J. T. McKay, who is paid by the Georgia Geological Survey. The bench mark consists of a copper plug set in the solid rock on the right bank, 27 feet upstream from the upper edge of the bridge; elevation, 7.05 feet above gage datum.

Discharge measurements of Tallulah River at Tallulah Falls

Date	Gage height	Discharge	Date	Gage height	Discharge
1899	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft*
October 3	0.55	158	September 29	.50	145
November 25	.75	188	October 28	.40	125
1900			October 28	.41	127
August 29	1.09	252	November 23	.77	171
1901			November 23	.75	169
January 18	1.35	681	1905		
February 15	1.85	617	March 3	1.70	471
March 4	2.80	1,227	May 11	1.83	605
May 22	3.94	2,161	May 27	2.10	678
May 23	3.24	1,566	May 28	2.10	681
May 23	3.15	1,479	June 21	1.34	375
July 15	1.58	488	June 22	1.77	621
August 27	3.45	1,601	July 18	2.08	705
September 18	2.80	1,309	July 18	2.08	683
October 19	1.55	506	September 6	1.15	317
1903			October 24	.89	228
June 23	1.96	698	November 15	.82	198
1904			1906		
March 16	1.65	490	January 24	3.26	1,490
May 12	1.96	516	February 14	1.82	577
June 11	1.20	306	June 27	1.50	416
June 13	1.05	295	July 26	2.20	788
July 15	.70	181	September 28	3.81	2,060
August 22	.92	233	September 29	5.59	4,450
August 23	.80	218	September 29	5.56	4,340
			December 31	4.22	2,600
			December 31	4.12	2,440

Daily gage height, in feet, of Tallulah River at Tallulah Falls

Day	Aug.	Sept.	Oct.	Day	Aug.	Sept.	Oct.	Day	Aug.	Sept.	Oct.
1900				1900				1900			
1		1.5	1.08	12		0.85	1.01	23		1.25	
2		1.4	1.08	13		.8	1.01	24		1.2	
3		1.1	1.02	14		1.2	1.0	25		1.2	
4		1.0	1.01	15		1.25	1.0	26		1.19	
5		1.0	1.01	16		2.9	1.0	27		1.17	
6		1.0	1.03	17		1.25	1.0	28		1.1	
7		1.0	1.03	18		1.7	1.0	29	1.0	1.09	
8		1.0	1.02	19		1.4	1.0	30	.95	1.04	
9		.9	1.02	20		1.35		31	1.6		
10		.9	1.01	21		1.3					
11		.9	1.01	22		5.4					

INDIAN ARROW RAPIDS, THE HEAD OF TALLULAH FALLS, GEORGIA.

Daily gage height, in feet, of Tallulah River at Tallulah Falls.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1901												
1	.....	1.9	1.8	2.7	2.4	2.5	2.25	1.4	3.2	1.85	1.4	1.25
2	.....	1.9	1.8	4.95	2.35	2.3	2.2	1.35	3.15	1.85	1.4	1.3
3	.....	2.95	1.75	4.9	2.3	2.2	2.2	1.3	3.1	1.8	1.4	1.3
4	.....	2.4	1.7	2.9	2.25	2.1	2.15	1.3	3.0	1.8	1.4	1.35
5	.....	2.0	1.65	2.85	2.25	2.05	2.1	1.25	3.9	1.8	1.4	1.35
6	.....	2.0	1.6	2.8	2.25	1.95	2.05	6.35	3.85	1.75	1.4	1.3
7	.....	1.95	1.6	2.75	2.2	1.9	2.0	4.25	3.85	1.75	1.4	1.3
8	.....	2.2	1.6	2.7	2.15	1.8	2.0	3.15	3.75	1.7	1.35	1.3
9	.....	2.2	1.6	2.6	2.1	1.8	1.95	2.75	3.7	1.7	1.35	1.3
10	.....	2.1	1.95	2.55	2.05	1.75	1.9	2.05	3.7	1.7	1.35	1.3
11	.....	2.0	2.1	2.45	2.0	1.75	1.9	1.9	3.6	1.65	1.35	1.4
12	.....	1.95	1.95	2.4	2.0	1.7	1.85	1.8	3.6	1.65	1.35	1.4
13	.....	1.95	1.7	2.6	1.85	1.8	1.8	1.9	3.5	1.65	1.35	1.35
14	.....	1.95	1.65	2.5	1.85	2.1	1.7	6.85	3.5	1.65	1.35	2.8
15	.....	1.9	1.65	2.4	1.8	2.0	1.6	3.9	3.4	1.65	1.3	2.8
16	.....	1.85	1.6	2.3	1.75	2.1	1.6	4.3	3.35	1.6	1.3	2.75
17	.....	1.85	1.55	2.2	1.75	2.2	1.55	5.4	3.25	1.6	1.3	2.75
18	1.95	1.85	1.55	2.1	1.7	2.4	1.55	3.4	3.1	1.6	1.3	2.7
19	1.9	1.85	1.5	5.5	1.9	2.5	2.0	3.15	2.9	1.6	1.35	2.7
20	1.9	1.8	1.5	5.5	2.5	2.5	2.15	2.75	2.6	1.55	1.35	2.7
21	1.9	1.8	2.0	3.8	3.5	2.4	2.05	2.4	2.3	1.55	1.3	2.65
22	1.9	1.8	1.95	3.6	4.9	2.3	1.95	4.55	2.2	1.55	1.3	2.4
23	1.95	1.8	1.85	3.3	3.3	2.3	1.85	4.25	2.1	1.5	1.3	2.15
24	1.95	1.8	1.85	2.9	2.8	2.25	1.75	3.8	2.0	1.5	1.3	1.8
25	1.9	1.8	7.5	2.8	2.6	2.25	1.7	3.5	1.95	1.5	1.3	1.6
26	1.9	1.8	6.5	2.75	2.5	2.35	1.65	3.2	1.95	1.5	1.3	1.5
27	1.9	1.8	4.5	2.7	2.45	2.4	1.55	3.3	1.9	1.5	1.3	1.45
28	1.9	1.8	3.9	2.6	2.4	2.4	1.55	5.8	1.9	1.45	1.3	1.4
29	1.9	.....	2.95	2.5	2.4	2.35	1.5	4.1	1.9	1.45	1.25	10.5
30	1.9	.....	2.9	2.45	2.35	2.3	1.5	3.15	1.95	1.45	1.25	5.8
31	1.95	.....	2.75	.....	2.3	.....	1.4	2.3	.....	1.4	.....	4.1

Day	July	Aug	Sept	Oct.	Nov.	Dec.	Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904							1904						
1	.....	0.9	0.9	0.5	0.4	0.7	17	0.7	1.4	0.7	0.4	0.5	0.8
2	.....	1.3	.8	.5	.4	.7	18	.7	1.3	.6	.4	.5	.8
3	.....	1.0	.8	.5	.6	.8	19	.7	1.1	.6	.4	.5	.7
4	.....	.9	1.8	.5	1.0	.8	20	.6	1.5	.7	.4	.5	.7
5	.....	.9	1.5	.5	.9	1.9	21	.6	1.0	.6	.4	.5	.7
6	.....	1.0	1.0	.5	.6	1.7	22	.6	.9	.6	.4	.6	.7
7	.....	2.5	.8	.5	.6	1.1	23	.7	.8	.6	.4	.6	.7
8	.....	2.5	.8	.5	.5	.9	24	.7	1.0	.6	.4	.6	.6
9	.....	1.6	.8	.5	.5	.8	25	1.2	1.4	.6	.4	.6	1.0
10	.....	1.7	.7	.5	.5	.8	26	.8	1.2	.6	.5	.5	.9
11	.....	2.6	.8	.5	.5	.7	27	.7	1.7	.6	.5	.5	.9
12	.....	2.0	.7	.5	.5	.7	28	.7	1.5	.7	.5	.5	2.4
13	.....	2.9	.8	.4	.8	.7	29	.8	1.1	.6	.5	.5	1.5
14	.....	1.7	.8	.4	.7	.7	30	.7	.9	.5	.4	.6	1.3
15	0.7	1.5	.7	.4	.6	.7	31	.9	.8	.....	.4	.....	1.1
16	.7	1.4	.7	.4	.5	.7							

Daily gage height, in feet, of Tallulah River at Tallulah Falls.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	1.1	1.2	1.8	1.6	1.7	1.2	3.5	1.4	1.1	0.8	0.9	0.9
2	1.0	1.1	1.7	1.6	1.6	1.2	1.9	1.4	1.1	.9	.9	1.0
3	1.0	1.1	1.7	1.5	1.8	1.1	1.4	1.3	1.0	.9	.9	4.5
4	.9	1.2	1.7	1.4	2.1	1.1	1.8	1.3	.9	1.1	.9	2.9
5	.9	1.2	1.6	1.8	2.0	1.1	2.0	1.4	.9	.9	1.0	2.5
6	1.0	1.5	1.7	1.6	2.9	1.2	4.2	1.4	1.1	.9	.9	1.3
7	1.8	1.8	1.7	1.7	2.9	1.2	1.3	1.3	1.0	.8	.9	1.2
8	1.3	1.8	1.8	1.7	2.2	1.4	1.7	2.3	1.1	.8	.9	1.4
9	1.1	2.7	3.5	1.5	2.1	1.3	1.6	2.1	1.1	1.1	.9	4.7
10	1.0	2.5	2.8	1.5	1.8	1.3	1.7	2.2	1.1	1.2	.8	2.8
11	1.1	2.3	2.3	1.5	1.7	1.4	3.5	2.5	1.0	3.1	.8	2.1
12	6.5	2.1	2.0	1.6	1.6	1.3	4.6	2.6	1.0	1.5	.8	1.8
13	3.2	3.2	1.8	1.6	1.6	1.2	3.4	2.5	1.0	1.3	.8	1.6
14	2.3	2.3	2.8	1.7	1.6	1.2	4.4	2.6	1.0	1.1	.8	1.6
15	1.9	2.1	1.7	1.7	1.7	1.3	3.0	2.0	.9	1.1	.8	1.7
16	1.6	1.8	1.7	1.8	3.1	1.4	2.4	1.8	1.0	1.1	.8	1.6
17	1.5	1.7	1.7	1.7	2.3	1.3	2.3	1.7	1.1	1.0	.9	1.7
18	1.4	1.5	1.6	1.7	2.0	1.4	2.1	1.7	1.0	1.0	.9	1.5
19	1.5	1.4	1.5	1.5	1.8	1.6	2.0	1.5	1.0	1.0	.9	1.5
20	1.4	2.5	1.7	1.5	1.6	1.7	2.1	1.6	.9	1.0	1.0	2.3
21	1.4	3.3	2.5	1.5	1.6	1.6	1.8	1.5	.9	1.0	1.0	2.1
22	1.4	3.0	2.0	1.5	1.8	1.8	1.7	1.4	1.0	1.0	.9	2.0
23	1.2	2.7	1.9	1.5	2.3	1.5	1.7	1.5	1.0	.9	.8	2.4
24	1.3	2.4	1.7	1.6	2.5	1.3	1.6	1.4	.9	.9	.9	2.4
25	1.3	2.2	1.7	1.6	1.8	1.3	1.6	1.5	.9	.9	1.0	2.5
26	1.1	2.0	1.8	1.7	1.9	1.2	1.7	1.5	.9	1.4	1.0	2.4
27	1.1	2.0	1.7	1.8	1.4	1.2	1.6	1.4	.8	1.3	.8	2.2
28	1.0	1.9	1.7	1.7	1.3	1.2	1.6	1.4	.8	1.2	.8	2.1
29	.9	.....	1.7	1.6	1.4	1.3	1.6	1.2	.8	1.0	.8	1.9
30	1.1	.....	1.6	1.9	1.2	1.4	1.4	1.2	.9	.9	.9	1.7
31	1.0	.....	1.6	.....	1.1	.....	1.4	1.1	.....	.9	.....	1.8
1906												
1	1.6	2.3	1.7	2.6	2.0	1.4	1.3	2.5	3.7	4.4	2.3	2.1
2	1.5	2.2	1.7	2.6	2.0	2.0	1.3	2.4	3.4	5.0	2.2	2.1
3	7.0	2.2	1.8	2.5	1.9	1.8	1.4	2.3	2.9	4.4	2.2	2.0
4	4.5	2.3	1.8	2.5	1.9	1.7	1.9	3.2	2.7	4.3	2.2	2.0
5	3.0	2.2	1.8	2.4	1.9	1.7	1.5	2.8	2.7	4.1	2.2	2.0
6	2.5	2.2	1.7	2.2	2.0	1.6	1.4	2.4	2.6	4.0	2.2	2.7
7	2.2	2.2	1.7	2.2	2.2	1.6	1.5	2.5	3.4	4.0	2.1	2.1
8	2.1	2.2	1.9	2.2	2.1	1.5	1.5	2.2	2.0	3.8	2.1	2.0
9	2.0	2.1	1.9	2.3	2.0	1.4	1.8	2.0	2.2	3.4	2.1	2.0
10	2.0	2.1	1.8	2.3	2.0	1.4	1.4	1.9	2.8	3.3	2.1	3.2
11	1.9	2.0	1.8	2.3	1.8	1.7	1.4	1.7	2.7	3.2	2.1	2.6
12	2.5	1.9	1.8	2.2	1.7	1.9	1.5	1.3	2.6	3.1	2.1	2.0
13	2.2	1.8	1.8	2.1	1.7	2.8	1.5	2.0	3.0	3.0	2.1	2.0
14	2.2	1.8	1.9	2.2	1.7	2.6	3.8	2.0	2.6	3.0	2.0	2.0
15	2.2	1.7	3.7	2.8	1.6	2.4	3.4	2.1	2.4	3.0	2.0	2.0
16	2.0	1.6	2.7	2.6	1.6	2.5	3.2	2.6	2.4	2.8	2.0	2.2
17	2.0	1.7	2.6	2.3	1.6	2.4	2.4	3.1	2.4	4.0	2.0	2.4
18	2.0	1.7	2.4	2.2	1.5	2.0	4.7	4.1	2.5	3.4	2.3	2.7
19	2.0	1.7	4.7	2.0	1.5	1.8	4.0	3.1	3.1	3.1	4.9	2.4
20	1.9	1.8	3.4	2.0	1.5	1.7	3.1	3.1	4.4	2.9	3.5	2.5
21	1.8	1.7	2.7	2.0	1.5	1.7	3.2	2.9	3.7	2.9	3.0	2.2
22	3.8	1.6	2.5	2.0	1.5	1.6	2.6	3.7	3.6	2.8	2.8	2.1
23	4.7	1.7	2.5	2.0	1.4	1.5	2.4	2.9	3.5	2.7	2.6	2.1
24	3.4	1.7	2.5	1.9	1.4	1.9	2.8	2.4	3.2	2.6	2.4	2.2
25	2.9	1.7	2.4	1.9	1.4	1.8	2.3	2.3	2.0	2.5	2.4	2.2
26	2.9	1.7	2.5	1.9	1.5	1.8	2.3	2.2	2.0	2.5	2.3	2.0
27	2.8	1.9	2.6	2.0	2.2	1.7	2.1	2.2	2.5	2.4	3.3	2.0
28	2.8	1.8	2.6	2.0	1.9	1.9	2.8	2.2	2.8	2.4	2.2	2.3
29	2.5	.....	2.7	2.1	1.7	2.6	2.1	3.2	4.4	2.4	2.2	2.3
30	2.4	.....	3.4	2.1	1.6	1.4	2.5	8.0	5.4	2.4	2.1	3.0
31	2.3	.....	2.8	.....	1.5	.....	2.4	4.1	.....	2.4	.....	5.0

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Rating table for Tallulah River at Tallulah Falls, from August 29, 1900, to December 31, 1905.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.40	125	1.30	355	2.20	800	3.50	1,805
0.50	145	1.40	395	2.30	860	4.00	2,230
0.60	165	1.50	435	2.40	930	5.00	3,080
0.70	185	1.60	480	2.50	1,000	6.00	3,930
0.80	210	1.70	525	2.60	1,070	7.00	4,780
0.90	235	1.80	575	2.70	1,145	8.00	5,630
1.00	260	1.90	630	2.80	1,220	9.00	6,480
1.10	290	2.00	685	2.90	1,300	10.00	7,330
1.20	320	2.10	740	3.00	1,380	11.00	8,180

a Above gage height 3.0 feet the rating curve is a tangent, the difference being 85 per tenth.

Rating table for Tallulah River at Tallulah Falls, Ga., for 1906.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.30	355	2.30	860	3.30	1,600	4.60	3,000
1.40	395	2.40	930	3.40	1,690	4.80	3,260
1.50	435	2.50	1,000	3.50	1,780	5.00	3,530
1.60	480	2.60	1,070	3.60	1,880	5.20	3,810
1.70	525	2.70	1,140	3.70	1,980	5.40	4,110
1.80	575	2.80	1,210	3.80	2,080	5.60	4,410
1.90	630	2.90	1,280	3.90	2,180	5.80	4,730
2.00	685	3.00	1,360	4.00	2,290	6.00	5,060
2.10	740	3.10	1,440	4.20	2,510	7.00	6,980
2.20	800	3.20	1,520	4.40	2,750	8.00	9,000

NOTE.—The above table is based on discharge measurements made during 1904–1906 and is well defined below gage height 6 feet.

Estimated monthly discharge of Tallulah River at Tallulah Falls.

[Drainage area, 191 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1900 *a*					
September	3,420	210	467	2.44	2.72
October (1-19)	269	260	264	1.38	.975
1901 *a*					
January (18-31)	658	630	638	3.34	1.74
February	1,340	575	670	3.51	3.66
March	5,200	435	1,007	5.27	6.08
April	3,500	740	1,442	7.55	8.42
May	6,060	525	1,070	5.60	6.46
June	1,000	525	782	4.09	4.56
July	880	395	603	3.16	3.64
August	4,650	338	1,690	8.85	10.20
September	2,145	630	1,379	7.22	8.06
October	602	395	491	2.57	2.96
November	395	338	369	1.93	2.15
December	7,760	338	1,029	5.39	6.21
1904					
July 15-31	320	165	195	1.02	0.645
August	1,300	210	447	2.34	2.70
September	575	145	209	1.09	1.22
October	145	125	135	.707	.815
November	260	125	160	.838	.935
December	980	165	266	1.39	1.60
1905					
January	4,360	235	526	2.75	3.17
February	1,635	290	744	3.90	4.06
March	1,805	435	649	3.40	3.92
April	630	395	490	2.57	2.87
May	1,465	290	650	3.40	3.92
June	575	290	369	1.93	2.15
July	2,740	355	900	4.71	5.43
August	1,070	290	537	2.81	3.24
September	290	210	254	1.33	1.48
October	1,465	210	312	1.63	1.88
November	260	210	230	1.20	1.34
December	2,825	235	793	4.15	4.78
The year	4,360	210	538	2.82	38.24
1906					
January	6,980	435	1,250	6.54	7.54
February	860	480	640	3.35	3.49
March	3,130	525	974	5.10	5.88
April	1,210	630	816	4.27	4.76
May	800	395	552	2.89	3.33
June	1,210	395	627	3.28	3.66
July	3,130	355	962	5.04	5.81
August	9,000	355	1,350	7.07	8.15
September	4,110	685	1,450	7.59	8.47
October	4,110	930	1,670	8.74	10.08
November	3,390	685	946	4.95	5.52
December	3,530	685	928	4.86	5.60
The year	9,000	355	1,010	5.31	72.29

a These are revised estimates based on the 1904 rating curve, which more nearly represents the true flow for low stages than the curve previously used.

NOTE.—Values for 1906 are excellent.

TUGALOO RIVER NEAR MADISON, SOUTH CAROLINA

This station was originally established July 19, 1898, at Cooks Ferry and was discontinued December 31, 1901, when the ferry was moved. It was reestablished July 7, 1903, by M. R. Hall, at Holcombs Ferry, 1 mile west of Madison, South Carolina, and 900 feet below the Southern Railway bridge. This station is about 1½ miles above the point where the old station was located.

The bed of the river is sandy and the current is moderately swift. The channel is about 160 feet wide and is fairly uniform in width and general appearance for some distance, being straight for 1,000 feet or more both above and below the station. The banks are both moderately high, but will overflow for about 200 feet on the right bank and 250 feet on the left. Both are open and cultivated except for a few trees along the edge of the river. These conditions make it possible to obtain fairly good float measurements at the time of floods.

Discharge measurements are made from the ferry boat, or a small boat which is held in place by a cable stretched across the river. The initial point for soundings is the land side of the windlass used for stretching the cable; it is located on the right bank. Distances are measured along the hand line which is used to pull the boat across the river.

The gage consists of a vertical timber in three sections. The first section reads from 1 to 16 feet and is attached to a sycamore tree on the left bank, about 30 feet above the ferry landing; the second section reads from 16 to 22 feet and is attached to a sycamore tree on the left bank, about 18 feet above the ferry landing; the third section reads from 21 to 31 feet and is fastened to a locust tree on the left bank at the forks of the road, about 175 feet from the ferry landing. The gage is read once each day by T. A. Spencer. The bench mark is a U. S. Geological Survey standard bronze tablet marked "666 Atlanta" on the right-bank pier of the Southern Railway bridge; elevation, 35.30 feet above the datum of the gage. It is 665.47 feet above sea level.

Discharge measurements of Tugaloo River near Madison, S. C.

Date	Gage height	Discharge	Date	Gage height	Discharge
1898	*Feet*	*Sec.-ft.*	1903	*Feet*	*Sec.-ft.*
May 25	1.50	902	August 28	2.18	798
June 9	.90	563	September 24	1.94	715
July 19	2.05	1,100	October 9	2.23	927
October 28	4.00	2,439	1904		
1899			January 13	1.81	680
April 21	4.50	2,604	March 11	3.86	1,679
May 22	3.20	1,687	June 10	2.30	809
June 20	2.10	1,325	July 23	1.80	622
September 12	1.00	734	September 6	2.52	896
1900			October 27	1.41	406
February 21	4.25	2,243	1905		
August 30	1.71	872	March 7	3.38	1,317
December 25	36.0	1,717	March 20	3.25	1,243
December 27	2.80	1,414	March 21	3.75	1,552
1901			March 21	4.00	1,795
February 14	3.40	1,669	May 1	3.31	1,264
May 24	5.65	3,120	June 29	2.56	874
1902			September 8	2.78	970
June 24	4.00	1,927	October 14	2.66	880
July 7	3.69	1,677	November 17	2.13	641
July 9	3.40	1,535	1906		
July 31	2.84	1,091	May 16	3.45	1,330
			June 26	3.68	1,410

Daily gage height, in feet, of Tugaloo River near Madison, S. C.

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1898							1898						
1	.....	2.3	6.4	3.0	3.6	5.0	17	.....	4.1	3.7	4.3	3.6	2.7
2	.....	2.1	20.0	2.8	3.5	3.4	18	.....	6.4	3.6	9.35	3.6	2.7
3	.....	6.2	17.0	3.1	3.4	3.4	19	2.1	5.7	3.4	6.2	4.7	2.7
4	.....	9.75	13.0	13.0	3.3	3.5	20	1.9	5.7	3.3	5.0	4.0	4.5
5	.....	9.2	8.2	22.0	3.4	4.3	21	1.8	4.3	3.2	5.5	3.6	3.5
6	.....	6.7	7.3	14.0	4.1	3.6	22	1.7	3.8	3.4	6.3	3.4	3.2
7	.....	5.4	6.3	8.7	3.4	3.5	23	4.1	3.4	3.1	5.2	6.3	7.8
8	.....	6.1	5.4	7.8	3.3	3.4	24	4.4	3.4	4.3	4.7	4.7	4.7
9	.....	4.7	4.9	6.8	3.2	3.3	25	4.5	3.8	3.7	4.5	4.1	4.0
10	.....	4.8	4.9	6.2	3.3	3.2	26	4.0	3.9	3.4	4.3	3.9	3.7
11	.....	8.9	4.8	5.8	4.1	3.6	27	2.9	3.6	3.3	4.2	3.6	3.5
12	.....	7.95	4.5	5.5	3.4	3.0	28	4.1	3.1	3.2	4.1	3.4	3.4
13	.....	6.7	4.2	5.1	3.3	2.9	29	3.0	2.9	3.2	3.9	3.5	3.3
14	.....	7.9	4.1	4.8	4.0	2.9	30	2.8	3.4	3.1	3.9	3.8	3.2
15	.....	4.8	3.9	4.6	3.5	2.8	31	4.3	3.2	.....	3.7	.....	3.3
16	.....	4.5	3.8	4.4	3.4	2.8							

Daily gage height, in feet, of Tugaloo River near Madison, S. C.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.
1899												
1	4.1	3.9	6.6	6.4	4.3	2.5	1.7	1.4	3.1	0.7	0.9	1.0
2	3.4	3.4	5.9	5.9	4.2	2.4	1.6	1.4	2.7	.7	.8	1.1
3	3.3	3.5	5.8	5.7	4.1	2.4	1.6	1.3	3.3	.7	.8	1.1
4	3.2	7.6	5.4	5.9	4.0	2.3	1.5	1.2	1.9	.7	.8	1.0
5	3.2	6.8	6.9	6.0	4.3	2.5	1.5	1.1	1.7	.8	.8	.9
6	6.45	11.85	6.0	5.6	4.1	3.3	1.6	1.1	1.4	.9	.7	.9
7	5.8	12.7	5.5	7.8	4.8	2.3	1.9	1.1	1.3	.8	.7	.9
8	4.6	8.8	5.2	8.7	4.0	2.2	1.6	1.0	1.2	3.3	.7	.8
9	4.2	6.8	5.1	6.8	3.8	2.1	1.6	1.0	1.2	2.5	.7	.8
10	3.9	5.8	4.9	6.2	3.7	2.0	1.6	1.4	1.1	1.5	.7	.8
11	4.2	5.5	4.8	5.8	3.7	2.2	1.5	1.3	1.1	1.0	.7	.9
12	4.1	5.3	4.7	5.5	3.6	3.9	1.4	1.0	1.0	.9	.7	12.3
13	3.9	8.4	4.2	5.3	3.6	5.3	1.3	.9	.9	.9	.7	8.45
14	4.0	4.4	8.05	5.2	3.4	3.5	1.3	1.0	.9	.8	.7	3.1
15	4.5	4.5	16.15	5.0	3.3	2.8	1.3	1.0	.8	.8	.7	2.5
16	4.0	5.6	13.8	5.1	3.2	2.4	1.2	1.0	.8	.8	.7	2.0
17	3.9	5.6	8.4	4.9	3.2	2.5	1.2	1.2	.8	.8	.7	1.8
18	3.7	5.0	6.9	4.8	3.1	2.4	1.2	1.0	.8	.9	.7	1.6
19	3.4	4.8	16.15	4.8	3.2	2.2	1.1	.9	.8	1.0	.7	1.6
20	3.4	4.6	11.6	4.6	3.0	2.1	1.2	.8	.9	1.0	.7	1.9
21	3.3	4.5	8.4	4.5	2.9	2.0	1.2	.8	.9	.9	.7	1.6
22	3.2	4.5	7.6	4.4	3.1	2.9	1.4	.8	.8	.9	.8	1.4
23	3.1	4.4	8.4	4.3	3.0	2.9	1.3	.9	.8	.9	.9	1.3
24	3.2	4.3	7.3	4.2	2.8	2.8	1.7	.8	.8	.8	1.1	5.0
25	3.4	4.1	6.8	6.8	2.7	2.0	1.4	.9	.8	.8	.9	3.0
26	3.2	6.5	6.4	6.0	2.7	1.8	4.1	.8	.9	.8	1.6	2.4
27	3.2	9.8	6.2	5.2	2.6	2.1	4.2	1.2	.9	.8	2.6	2.0
28	3.1	8.1	6.1	4.8	2.6	2.1	2.4	1.0	.8	.8	1.7	1.9
29	3.0	.....	6.8	4.6	2.6	2.0	2.9	.9	.8	.9	1.3	1.8
30	2.9	.....	6.0	4.4	2.5	1.8	1.9	1.4	.7	.9	1.1	1.6
31	3.1	.....	6.9	.....	2.5	.....	1.6	6.5	.....	.8	.....	1.4

Daily gage height, in feet, of Tugaloo River near Madison, S. C.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900												
1	1.4	1.6	9.4	3.5	4.2	2.3	5.1	3.1	2.5	1.7	2.1	2.5
2	1.3	1.6	5.5	3.4	4.1	2.6	5.6	2.8	2.8	1.6	2.1	2.4
3	1.3	1.8	3.9	3.4	4.3	2.8	5.1	2.7	2.1	1.7	2.2	2.3
4	1.3	1.7	3.9	3.6	4.0	2.7	4.6	2.5	1.9	1.7	2.9	5.6
5	1.2	2.5	3.7	3.7	3.8	2.9	4.2	2.5	1.8	1.9	2.3	4.8
6	1.2	2.3	3.5	3.4	3.7	2.9	3.9	2.4	1.7	3.2	2.1	3.4
7	1.2	2.1	3.8	3.3	3.6	5.5	3.8	2.3	1.6	1.8	2.0	3.1
8	1.2	2.2	4.3	3.2	3.4	6.7	3.6	2.3	1.6	1.8	2.0	3.0
9	1.2	3.0	6.6	3.1	3.4	4.5	3.8	2.2	1.5	1.5	1.9	2.9
10	1.4	3.5	5.1	3.1	3.3	3.6	3.6	2.1	1.5	1.8	1.9	2.6
11	1.6	4.6	4.5	3.3	3.2	3.3	3.7	2.1	1.5	1.7	1.8	2.5
12	5.5	7.0	4.2	4.1	3.1	3.0	3.6	2.1	1.4	1.6	1.8	2.4
13	3.3	19.95	3.9	3.8	3.1	3.3	3.9	2.2	1.4	2.6	1.8	2.3
14	2.5	9.0	3.7	3.4	3.0	3.3	3.9	2.0	1.6	1.8	1.7	2.3
15	2.1	6.2	3.6	3.2	2.9	3.1	3.7	2.3	3.1	1.6	1.7	2.2
16	2.0	5.2	5.1	3.0	2.9	3.0	3.6	2.1	7.3	1.6	1.7	2.2
17	1.9	4.5	4.0	5.9	2.8	6.9	3.2	2.3	4.0	1.5	1.7	2.1
18	1.8	4.0	3.6	5.1	2.8	5.3	3.1	2.1	2.9	1.5	1.8	2.1
19	4.5	3.8	3.7	7.6	3.3	4.5	3.0	2.0	2.6	1.4	1.9	2.0
20	6.9	3.5	6.2	7.5	2.8	3.9	2.9	1.9	2.3	1.4	2.0	2.3
21	3.4	3.5	5.0	13.4	2.7	3.5	2.8	1.8	2.2	1.4	2.0	4.2
22	3.1	5.0	4.4	8.3	2.6	4.2	2.8	1.8	2.1	1.6	2.0	3.3
23	2.9	4.0	4.2	6.3	2.5	5.8	3.1	2.1	2.0	7.4	1.9	3.0
24	2.4	3.8	4.1	6.2	3.3	13.0	2.9	2.3	2.0	6.8	1.9	4.2
25	2.4	4.0	4.2	5.3	2.9	9.4	2.7	2.1	2.9	4.9	2.2	3.6
26	2.2	3.5	5.8	4.9	2.9	11.4	3.6	2.2	1.8	3.9	9.4	3.1
27	2.1	3.3	4.8	4.6	2.7	6.5	3.2	1.9	2.1	2.9	5.2	2.8
28	1.9	3.1	4.3	4.9	2.5	6.9	3.8	1.8	1.9	2.9	4.1	2.7
29	1.9	.....	4.1	4.7	2.5	6.4	3.1	1.7	1.8	2.5	3.0	2.6
30	1.8	.....	3.9	4.4	2.4	5.7	4.2	1.7	1.7	2.3	3.4	2.6
31	1.8	.....	3.7	.....	2.3	.....	3.3	2.8	.....	2.2	.....	4.0
1901												
1	3.3	2.9	2.4	4.4	4.7	4.6	4.1	2.4	7.3	3.7	2.5	1.9
2	3.1	2.8	2.6	6.6	4.6	4.1	3.8	2.4	6.7	3.9	2.5	1.9
3	2.8	3.0	2.5	10.3	4.5	3.0	3.4	2.3	6.1	4.0	2.5	3.1
4	2.7	6.9	2.5	6.7	4.4	3.9	3.3	2.3	5.6	3.6	2.4	2.7
5	2.6	4.3	2.5	5.8	4.3	3.8	3.2	2.1	5.4	3.5	2.5	2.6
6	2.5	3.9	2.4	5.5	4.4	3.7	3.4	4.1	5.2	3.4	2.4	2.4
7	2.5	3.5	2.3	4.0	4.3	4.1	4.2	9.8	5.1	3.3	2.3	2.2
8	2.4	3.4	2.3	4.7	4.0	5.8	3.4	4.5	4.9	3.2	2.3	2.0
9	2.4	4.8	2.3	4.4	4.0	3.5	3.2	3.6	4.8	3.2	2.3	4.1
10	2.4	4.4	2.3	4.4	4.9	3.4	3.0	3.2	4.7	3.2	2.2	3.1
11	10.35	3.9	4.0	4.3	4.9	3.4	2.9	3.6	5.4	3.2	2.2	3.0
12	12.4	3.8	3.3	4.2	3.8	3.1	2.8	3.9	4.5	3.1	2.2	2.9
13	6.7	3.6	3.0	4.1	3.7	3.4	2.7	4.0	4.9	3.6	2.4	2.6
14	5.5	3.5	2.9	6.7	3.6	5.5	2.8	12.1	3.9	3.2	2.3	3.2
15	4.6	3.3	2.6	5.6	3.6	9.1	2.7	10.5	4.1	3.1	2.1	9.9
16	4.2	3.1	2.6	4.7	3.5	8.0	4.1	11.3	9.7	3.1	2.1	6.9
17	4.2	3.1	2.5	4.3	3.0	5.6	3.3	12.3	8.6	3.0	2.0	5.1
18	3.9	3.0	2.5	4.2	3.0	6.6	2.7	11.5	7.9	3.0	2.0	4.3
19	3.5	3.0	2.5	7.3	3.8	4.2	4.3	8.3	6.5	3.9	2.1	4.1
20	3.3	2.9	2.4	22.0	5.2	4.4	4.1	7.5	4.9	2.9	2.1	3.9
21	3.3	2.8	6.1	9.6	9.9	4.3	3.1	7.3	4.6	2.8	2.0	3.7
22	3.2	2.7	3.7	7.4	17.1	4.1	3.4	10.95	4.3	2.8	2.0	3.2
23	3.1	2.6	3.2	6.7	8.6	3.9	2.8	18.5	4.2	2.8	2.0	3.1
24	3.2	2.7	3.6	6.1	5.9	4.0	2.6	10.1	4.1	2.7	2.5	3.4
25	3.3	2.6	7.9	5.7	5.7	3.9	2.5	7.6	4.0	2.7	2.2	3.6
26	3.3	2.5	19.6	5.6	5.2	5.2	2.5	7.8	3.9	2.7	2.1	3.7
27	3.0	2.4	10.1	5.2	4.8	4.9	3.1	6.9	3.7	2.6	2.0	4.0
28	3.1	2.4	6.7	5.2	4.6	4.9	2.5	9.7	3.8	2.6	1.9	4.0
29	3.9	.....	5.7	4.9	4.4	4.6	2.4	11.9	4.2	2.6	1.9	20.0
30	3.8	.....	4.5	4.8	4.2	4.2	2.5	9.0	3.9	2.5	1.9	10.0
31	2.8	.....	4.4	.....	4.3	.....	2.5	8.6	.....	2.5	.....	7.1

Daily gage height, in feet, of Tugaloo River near Madison, S. C.—Continued.

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903							1903						
1		2.8	2.0	1.7	1.8	1.6	17	3.3	4.9	3.9	1.7	1.8	1.7
2		5.4	1.9	1.7	1.9	1.6	18	3.2	3.8	3.5	2.4	2.8	1.7
3		4.6	1.9	1.9	2.8	1.6	18	3.1	2.9	2.3	2.0	2.2	1.5
4		4.2	1.9	1.8	2.2	1.6	20	3.1	2.7	2.1	1.8	1.9	1.7
5		3.4	1.9	1.7	3.0	1.6	21	3.0	3.0	2.0	1.8	1.8	2.5
6		2.9	1.9	1.7	2.5	1.7	22	2.9	2.6	2.0	1.7	1.8	2.0
7	3.7	2.8	1.8	1.8	2.1	1.6	23	2.9	2.5	1.9	1.7	1.8	1.9
8	3.7	2.7	1.8	2.4	1.9	1.6	24	2.8	2.4	1.9	1.7	1.8	1.8
9	3.4	2.5	1.8	2.4	1.9	1.6	25	2.7	2.3	1.9	1.6	1.7	1.9
10	3.6	2.4	1.9	1.9	1.8	1.6	26	2.7	2.3	1.8	1.6	1.7	2.0
11	3.9	3.0	1.8	1.8	1.8	1.6	27	2.7	2.2	1.9	1.6	1.7	1.9
12	4.4	2.8	1.7	1.8	1.8	1.6	28	2.6	2.1	1.9	1.6	1.6	1.8
13	4.5	2.7	1.7	1.7	1.9	1.8	29	3.1	2.1	1.8	1.6	1.6	1.8
14	4.1	2.6	1.7	1.7	1.9	2.0	30	2.7	2.1	1.7	1.6	1.6	1.8
15	3.6	2.7	4.1	1.6	1.8	1.8	31	2.9	2.0		1.6		1.8
16	3.2	4.3	5.6	1.6	1.9	1.8							

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
1	1.7	2.0	2.7	3.35	2.7	3.3	2.4	3.7	2.35	1.6	1.4	1.5
2	1.7	1.9	2.8	3.2	2.7	3.4	2.0	3.95	2.2	1.55	1.4	1.6
3	1.8	1.9	2.8	3.1	2.85	2.8	2.0	2.5	2.4	1.6	1.5	1.6
4	1.7	1.9	2.5	2.95	3.1	2.6	1.9	2.4	3.2	1.55	2.2	1.7
5	1.6	1.9	2.5	2.9	2.9	2.4	1.8	2.4	3.2	1.5	2.2	2.0
6	1.6	1.8	2.3	2.85	2.8	2.35	1.8	2.45	2.65	1.5	2.0	4.9
7	1.9	2.0	13.2	4.1	2.7	2.3	1.8	7.0	2.3	1.5	1.6	2.6
8	1.7	4.8	6.9	3.9	4.95	3.3	1.8	6.9	2.2	1.5	1.5	2.1
9	1.6	3.0	5.0	6.1	6.5	2.5	2.1	4.1	2.2	1.5	1.5	1.9
10	1.6	2.5	4.2	4.5	4.5	2.3	2.3	5.5	2.2	1.55	1.5	1.8
11	1.7	2.6	3.9	4.0	3.6	2.3	2.0	6.6	2.05	1.5	1.5	1.8
12	1.7	2.9	3.6	3.7	3.3	2.3	1.9	5.4	2.1	1.45	1.5	1.8
13	1.8	2.3	3.4	3.5	3.1	2.2	2.1	3.8	2.05	1.45	1.8	1.8
14	1.7	2.1	3.5	3.4	3.05	2.1	1.8	3.3	2.0	1.4	2.0	1.7
15	1.7	2.1	3.6	3.3	3.0	2.1	1.75	2.8	1.9	1.4	1.8	1.7
16	1.6	2.1	3.3	3.2	2.9	2.1	1.7	3.0	1.85	1.4	1.6	1.65
17	1.9	2.1	3.1	3.1	2.8	2.1	1.8	2.5	1.9	1.4	1.5	1.7
18	2.0	2.0	3.05	3.1	2.75	2.1	1.8	2.3	1.8	1.4	1.5	1.75
19	1.8	2.2	2.95	3.0	2.7	2.1	1.7	2.2	1.75	1.35	1.5	1.7
20	1.8	4.4	2.85	2.9	2.6	2.5	1.6	3.8	1.75	1.35	1.5	1.65
21	1.7	3.2	2.8	2.95	2.55	2.5	1.55	2.5	1.75	1.4	1.55	1.6
22	5.1	9.5	5.3	2.9	2.5	2.2	2.2	2.2	1.9	1.35	1.6	1.65
23	6.5	5.4	5.3	2.8	2.5	2.1	1.85	2.05	1.8	1.35	1.8	1.6
24	3.4	4.2	5.8	2.8	2.45	2.0	1.75	2.2	1.7	1.35	1.7	1.6
25	2.8	3.5	2.9	2.8	2.45	1.95	1.9	2.2	1.7	1.4	1.55	1.9
26	2.4	3.2	4.7	2.9	2.4	1.95	2.0	2.85	1.7	1.4	1.5	2.0
27	2.3	3.0	4.3	3.3	2.4	1.9	1.9	4.5	1.7	1.4	1.5	1.95
28	2.2	3.0	4.0	2.9	2.3	1.9	1.7	3.6	1.65	1.4	1.5	7.0
29	2.2	2.8	3.7	2.85	2.25	2.7	2.0	2.8	1.7	1.45	1.5	3.5
30	2.1		3.5	2.8	2.4	3.6	1.9	2.5	1.6	1.4	1.5	2.7
31	2.0		3.4		5.2		3.95	2.3		1.4		2.8
1905												
1	2.1	2.4	3.8	2.9	3.4	3.6	21.5	3.4	3.0	2.35	2.35	2.2
2	2.1	2.4	3.6	2.9	3.1	3.5	7.1	3.3	3.8	2.35	2.3	2.1
3	2.1	2.35	3.5	2.9	3.5	3.4	4.9	3.2	3.7	2.3	2.3	12.3
4	2.0	2.25	3.4	2.9	4.5	3.3	4.1	3.2	3.2	3.2	2.3	5.2
5	1.8	2.2	3.3	3.1	4.1	3.2	4.8	3.3	6.1	2.6	2.3	3.7
6	1.9	3.2	3.2	3.3	5.8	3.1	4.7	3.5	2.9	2.4	2.3	3.1
7	4.4	4.0	3.4	3.1	6.2	3.0	4.8	3.3	2.8	2.35	2.35	2.86
8	2.8	3.4	3.4	2.9	5.0	3.0	4.1	4.5	2.8	2.3	2.3	2.8
9	2.4	7.3	3.3	2.9	4.6	2.9	4.0	4.6	2.85	2.3	2.3	12.6
10	2.4	6.6	4.6	3.1	4.0	2.9	4.0	6.2	2.75	2.4	2.3	7.0
11	2.3	4.9	5.1	2.9	3.8	2.8	7.7	6.7	2.7	7.4	2.25	5.0
12	11.8	4.5	4.3	2.95	3.6	2.8	14.0	6.4	2.75	4.0	2.25	4.2
13	8.7	7.9	4.0	3.5	3.5	2.8	10.3	6.8	2.9	3.5	2.25	3.3
14	5.3	5.8	4.0	3.2	3.3	2.7	14.5	6.0	2.7	2.6	2.2	3.5
15	4.0	4.8	3.7	3.0	3.2	2.9	8.0	5.3	2.6	2.6	2.2	3.9

Daily gage height, in feet, of Tugaloo River near Madison, S. C.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
16	3.6	4.0	3.6	3.2	5.9	3.4	6.7	4.7	2.6	2.65	2.15	3.9
17	3.3	3.9	3.4	3.0	4.6	3.6	6.0	4.3	2.6	2.5	2.15	3.6
18	3.0	3.5	3.4	2.9	3.9	3.1	5.3	4.2	2.55	2.4	2.1	3.4
19	2.9	3.3	3.3	2.8	3.6	2.9	5.3	4.1	2.6	2.45	2.1	3.2
20	2.9	7.1	3.3	2.8	3.4	3.2	5.3	3.9	2.6	2.45	2.55	3.4
21	2.8	9.5	3.5	2.75	3.3	3.4	4.7	3.8	2.6	2.45	2.35	7.0
22	2.6	6.9	4.1	2.8	3.5	3.8	4.5	3.7	2.5	2.3	2.2	5.2
23	2.5	5.9	3.7	2.7	6.2	3.3	4.2	3.5	2.45	2.35	2.15	4.4
24	2.5	5.1	3.5	2.7	6.6	3.0	4.1	3.9	2.4	2.3	2.1	4.6
25	2.4	4.7	3.4	2.65	4.5	2.8	4.0	3.8	2.35	2.35	2.3	4.1
26	2.0	4.4	3.3	2.7	4.3	2.7	3.9	4.0	2.35	2.9	2.4	3.8
27	2.1	4.1	3.2	3.5	4.9	2.6	3.8	3.4	2.3	2.7	2.25	3.6
28	2.4	4.0	3.1	3.3	5.4	2.65	3.7	3.3	2.3	2.5	2.15	3.5
29	2.3	.....	3.1	3.0	4.6	2.6	3.8	3.2	2.3	2.45	2.15	4.5
30	2.4	.....	3.0	4.0	4.1	15.0	3.6	3.1	2.3	2.45	2.2	3.9
31	2.4	.....	3.0	.....	3.9	.....	3.5	3.0	.....	2.4	.....	3.6
1906												
1	3.45	5.2	3.6	6.6	4.45	3.25	3.2	7.3	8.0	14.4	5.2	4.6
2	3.35	5.0	3.5	6.0	4.15	3.5	3.0	6.0	6.8	11.2	5.1	4.55
3	13.4	4.85	4.25	5.6	4.05	3.65	3.1	5.2	6.3	15.4	5.0	4.5
4	18.0	4.75	6.6	5.4	4.35	4.5	4.9	6.0	6.0	14.0	4.95	4.45
5	9.0	4.65	5.6	5.2	4.05	3.7	3.7	5.8	6.4	11.1	4.9	4.35
6	6.2	4.55	4.55	5.2	3.95	3.7	3.3	5.4	5.8	11.2	4.85	4.3
7	5.4	4.55	4.25	5.0	4.35	3.35	3.75	5.4	9.4	10.6	5.2	4.8
8	5.0	4.4	4.85	4.85	4.05	3.25	3.6	5.0	7.3	9.6	4.7	4.3
9	5.2	4.35	4.65	4.8	3.9	3.15	4.6	4.7	5.7	8.8	4.65	4.3
10	4.75	4.25	4.35	5.6	3.75	3.3	3.6	4.5	5.5	8.4	4.6	4.2
11	4.35	4.15	4.15	4.85	3.75	4.2	3.8	4.4	5.2	8.0	4.6	7.1
12	5.2	4.25	4.05	4.7	3.7	3.4	3.8	4.2	8.0	7.7	4.55	5.1
13	4.85	4.3	3.95	4.6	3.65	5.8	3.35	4.2	9.2	7.4	4.5	4.7
14	4.85	4.15	3.95	4.55	3.6	6.9	3.2	4.8	5.6	9.2	4.4	4.6
15	4.65	4.05	12.2	7.2	3.55	5.2	17.5	7.2	5.3	7.0	4.6	4.45
16	4.85	3.95	7.2	5.8	3.45	6.2	9.3	7.2	5.1	6.9	4.5	4.3
17	4.55	3.85	5.6	5.2	3.4	5.4	8.3	5.4	4.95	6.7	4.5	5.9
18	4.35	3.8	5.0	4.95	3.35	4.7	12.9	12.7	9.2	6.6	9.7	7.4
19	4.35	3.75	11.2	4.75	3.25	4.15	7.9	7.1	16.2	8.7	11.5	5.4
20	4.15	3.75	9.0	4.65	3.3	4.0	7.4	7.6	14.0	7.1	8.4	5.6
21	4.05	3.85	6.8	4.55	3.2	3.75	7.6	6.1	9.5	6.7	6.9	5.3
22	10.2	4.35	6.0	4.45	3.3	3.55	6.5	6.1	8.8	6.4	6.3	5.2
23	18.0	3.95	5.6	4.4	3.25	3.4	5.9	6.6	8.1	6.3	5.8	4.8
24	9.0	3.85	5.2	4.25	3.15	3.7	6.8	6.6	7.7	6.1	5.5	4.6
25	7.2	3.8	5.0	4.25	3.1	3.6	5.4	5.8	7.4	6.0	5.2	4.4
26	6.8	3.7	4.95	4.15	3.45	3.75	5.1	5.6	7.3	5.8	5.1	4.35
27	6.8	3.7	4.95	4.15	5.5	3.4	4.8	6.1	6.9	5.7	5.0	4.3
28	6.6	3.65	5.2	4.45	3.9	3.3	5.4	5.2	7.3	5.6	5.5	4.5
29	6.2	.....	5.8	4.25	3.8	3.35	4.9	5.2	11.5	5.5	4.8	4.8
30	5.8	.....	8.9	4.85	3.5	3.2	5.9	16.8	19.6	5.4	4.7	4.6
31	5.6	.....	8.4	.....	3.35	.....	7.3	11.4	.....	5.3	.....	15.5

Rating tables for Tugaloo River near Madison, S. C.

JULY 19 TO DECEMBER 31, 1898.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft*	*Feet*	*Sec.-ft*	*Feet*	*Sec.-ft*	*Feet*	*Sec.-ft*
1.70	975	3.10	1,807	4.50	2,835	5.90	3,941
1.80	1,030	3.20	1,874	4.60	2,914	6.00	4,020
1.90	1,085	3.30	1,941	4.70	2,993	6.20	4,178
2.00	1,140	3.40	2,008	4.80	3,072	6.40	4,336
2.10	1,200	3.50	2,075	4.90	3,151	6.60	4,494
2.20	1,260	3.60	2,148	5.00	3,230	6.80	4,652
2.30	1,320	3.70	2,221	5.10	3,309	7.00	4,810
2.40	1,380	3.80	2,294	5.20	3,388	7.20	4,968
2.50	1,440	3.90	2,367	5.30	3,467	7.40	5,126
2.60	1,500	4.00	2,440	5.40	3,546	7.60	5,284
2.70	1,560	4.10	2,519	5.50	3,625	7.80	5,442
2.80	1,620	4.20	2,598	5.60	3,704	8.00	5,600
2.90	1,680	4.30	2,677	5.70	3,783		
3.00	1,740	4.40	2,756	5.80	3,862		

JANUARY 1 TO DECEMBER 31, 1899.[b]

0.70	512	3.00	1,685	5.30	3,100	9.20	6,220
.80	563	3.10	1,736	5.40	3,180	9.40	6,380
.90	614	3.20	1,787	5.50	3,260	9.60	6,540
1.00	665	3.30	1,838	5.60	3,340	9.80	6,700
1.10	716	3.40	1,889	5.70	3,420	10.00	6,860
1.20	767	3.50	1,940	5.80	3,500	10.50	7,260
1.30	818	3.60	1,991	5.90	3,580	11.00	7,660
1.40	869	3.70	2,042	6.00	3,660	11.50	8,060
1.50	920	3.80	2,093	6.20	3,820	12.00	8,460
1.60	971	3.90	2,144	6.40	3,980	12.50	8,860
1.70	1,022	4.00	2,195	6.60	4,140	13.00	9,260
1.80	1,073	4.10	2,250	6.80	4,300	13.50	9,660
1.90	1,124	4.20	2,310	7.00	4,460	14.00	10,060
2.00	1,175	4.30	2,370	7.20	4,620	14.50	10,460
2.10	1,226	4.40	2,434	7.40	4,780	15.00	10,860
2.20	1,277	4.50	2,500	7.60	4,940	15.50	11,260
2.30	1,328	4.60	2,570	7.80	5,100	16.00	11,660
2.40	1,379	4.70	2,640	8.00	5,260	17.00	12,460
2.50	1,430	4.80	2,710	8.20	5,420	18.00	13,260
2.60	1,481	4.90	2,780	8.40	5,580	19.00	14,000
2.70	1,533	5.00	2,860	8.60	5,740	20.00	14,866
2.80	1,583	5.10	2,940	8.80	5,900		
2.90	1,634	5.20	3,020	9.00	6,060		

a Discharge estimated above gage height 8.00 feet.

b Above gage height 4.00 feet the rating curve is a tangent, the difference being 80 per tenth.

Rating tables for Tugaloo River near Madison, S. C.—Continued.

JANUARY 1, 1900, TO DECEMBER 31, 1901.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.20	705	2.20	1,090	3.20	1,580	4.20	2,220
1.30	740	2.30	1,135	3.30	1,635	4.30	2,300
1.40	775	2.40	1,180	3.40	1,690	4.40	2,380
1.50	810	2.50	1,225	3.50	1,745	4.50	2,460
1.60	845	2.60	1,275	3.60	1,800	4.60	2,540
1.70	880	2.70	1,325	3.70	1,860	4.70	2,620
1.80	920	2.80	1,375	3.80	1,920	4.80	2,700
1.90	960	2.90	1,425	3.90	1,990		
2.00	1,000	3.00	1,475	4.00	2,060		
2.10	1,045	3.10	1,525	4.10	2,140		

JULY 7 TO DECEMBER 31, 1903.

1.50	510	2.50	980	3.50	1 560	4.50	2,320
1.60	552	2.60	1,032	3.60	1,630	4.60	2,400
1.70	596	2.70	1,086	3.70	1,700	4.70	2,480
1.80	640	2.80	1,140	3.80	1,775	4.80	2,560
1.90	686	2.90	1,195	3.90	1,850	4.90	2,640
2.00	732	3.00	1,250	4.00	1,925	5.00	2,720
2.10	780	3.10	1,310	4.10	2,000	5.40	3,040
2.20	828	3.20	1,370	4.20	2,080	5.60	3,200
2.30	878	3.30	1,430	4.30	2,160		
2.40	928	3.40	1,495	4.40	2,240		

JANUARY 1 TO DECEMBER 31, 1904.

1.35	435	2.50	915	3.70	1,582	5.80	3,180
1.40	452	2.60	963	3.80	1,646	6.00	3,365
1.50	490	2.70	1,012	3.90	1,710	6.20	3,555
1.60	528	2.80	1,062	4.00	1,775	6.40	3,745
1.70	567	2.90	1,114	4.20	1,905	6.60	3,940
1.80	607	3.00	1,168	4.40	2,045	6.80	4,140
1.90	648	3.10	1,224	4.60	2,195	7.00	4,340
2.00	690	3.20	1,281	4.80	2,345	9.50	7,325
2.10	733	3.30	1,339	5.00	2,505	13.20	14,450
2.20	777	3.40	1,398	5.20	2,665		
2.30	822	3.50	1,458	5.40	2,830		
2.40	868	3.60	1,519	5.60	3,000		

JANUARY 1 TO DECEMBER 31, 1905.[b]

1.80	520	3.30	1,275	4.80	2,410	7.60	5,220
1.90	560	3.40	1,340	4.90	2,500	7.80	5,440
2.00	600	3.50	1,405	5.00	2,590	8.00	5,660
2.10	640	3.60	1,470	5.20	2,770	9.00	6,860
2.20	680	3.70	1,540	5.40	2,960	10.00	8,060
2.30	725	3.80	1,610	5.60	3,160	11.00	9,260
2.40	770	3.90	1,680	5.80	3,360	12.00	10,460
2.50	820	4.00	1,755	6.00	3,560	13.00	11,660
2.60	870	4.10	1,830	6.20	3,760	14.00	12,860
2.70	925	4.20	1,910	6.40	3,960	15.00	14,060
2.80	980	4.30	1,990	6.60	4,160	16.00	15,260
2.90	1,035	4.40	2,070	6.80	4,360	18.00	17,660
3.00	1,095	4.50	2,155	7.00	4,560	20.00	20,060
3.10	1,155	4.60	2,240	7.20	4,780	22.00	22,460
3.20	1,215	4.70	2,325	7.40	5,000		

a Above gage height 4.90 this table is the same as the 1899 table.
b Above gage height 8.00 feet the rating curve is a tangent, the difference being 120 per tenth.

Estimated monthly discharge of Tugaloo River near Madison, S. C.

[Drainage area, 598 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1898					
July 19-31	2,835	975	1,824	3.08	1.49
August	6,962	1,200	3,354	5.66	6.52
September	13,658	1,807	3,771	6.36	7.10
October	13,816	1,620	4,238	7.15	8.24
November	4,257	1,874	2,267	3.82	4.26
December	5,442	1,560	2,159	3.64	4.20
1899					
January	4,020	1,634	2,099	3.54	4.08
February	9,020	1,889	3,790	6.37	6.63
March	11,780	2,310	4,771	8.05	9.28
April	5,820	2,310	3,276	5.52	6.16
May	2,710	1,430	1,881	3.17	3.66
June	3,100	1,078	1,448	2.44	2.72
July	2,310	716	1,027	1.73	1.99
August	4,060	563	801	1.35	1.56
September	1,838	512	765	1.29	1.44
October	1,838	512	662	1.12	1.29
November	1,481	512	619	1.04	1.16
December	8,700	563	1,411	2.38	2.74
The year	11,780	512	1,879	3.17	42.71
1900					
January	4,380	705	1,223	2.06	2.38
February	14,820	845	2,508	4.23	4.40
March	6,380	1,745	2,505	4.22	4.86
April	9,580	1,475	2,751	4.64	5.17
May	2,300	1,135	1,562	2.63	3.04
June	9,260	1,135	2,931	4.94	5.51
July	3,340	1,325	1,884	3.18	3.66
August	1,525	880	1,095	1.85	2.13
September	5,340	775	1,305	2.20	2.45
October	4,780	775	1,290	2.18	2.52
November	6,380	880	1,322	2.23	2.49
December	3,340	1,000	1,491	2.51	2.90
The year	14,820	705	1,822	3.07	41.51
1901					
January	8,780	1,180	2,153	3.63	4.19
February	4,380	1,180	1,719	2.90	3.02
March	15,540	1,135	2,444	4.12	4.75
April	16,460	2,060	3,804	6.42	7.16
May	12,540	1,475	2,932	4.95	5.71
June	6,140	1,475	2,549	4.30	4.80
July	2,300	1,180	1,570	2.65	3.06
August	13,660	1,045	4,876	8.22	9.48
September	6,620	1,860	3,047	5.14	5.74
October	2,060	1,225	1,542	2.60	3.00
November	1,225	960	1,091	1.84	2.05
December	14,860	960	2,577	4.35	5.01
The year	16,460	960	2,525	4.26	57.97
1903					
July 7-31	2,820	1,032	1,441	2.43	2.26
August	3,040	732	1,283	2.16	2.49
September	3,200	596	874	1.47	1.64
October	928	552	634	1.07	1.23
November	1,250	552	720	1.21	1.35
December	980	510	623	1.05	1.21
1904					
January	3,840	528	829	1.40	1.61
February	7,325	607	1,304	2.20	2.37
March	14,450	822	2,100	3.54	4.08
April	3,460	1,062	1,369	2.31	2.58
May	3,840	800	1,259	2.12	2.44
June	1,519	648	880	1.48	1.65
July	1,742	509	682	1.15	1.33
August	4,340	712	1,543	2.60	3.00
September	1,281	528	717	1.21	1.35
October	528	435	469	.791	.912
November	777	452	539	.909	1.01
December	4,340	490	830	1.40	1.61
The year	14,450	435	1,043	1.76	23.94

Estimated monthly discharge of Tugaloo River near Malison, S. C.—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1905					
January	10,220	520	1,442	2.43	2.80
February	7,460	680	2,494	4.21	4.33
March	2,690	1,095	1,466	2.47	2.85
April	1,755	898	1,107	1.87	2.09
May	4,160	1,155	2,087	3.52	4.06
June	14,060	870	1,572	2.65	2.96
July	21,860	1,405	4,025	6.79	7.83
August	4,360	1,095	1,986	3.35	3.86
September	1,610	725	942	1.59	1.77
October	5,000	725	996	1.68	1.94
November	845	640	704	1.19	1.33
December	11,180	640	2,414	4.07	4.69
The year	21,860	520	1,770	2.98	40.56
1906					
January	72,000	9,140	23,400	3.55	4.09
February	13,800	7,540	10,300	1.56	1.62
March	59,500	7,230	18,900	2.86	3.30
April	18,900	7,080	10,500	1.59	1.77
May	16,500	5,760	8,210	1.24	1.43
June	38,200	5,220	12,600	1.91	2.13
July	33,000	5,760	16,100	2.44	2.81
August	26,100	8,170	14,400	2.18	2.51
September	39,200	8,170	16,500	2.50	2.79
October	43,100	8,490	16,000	2.42	2.79
November	20,100	7,540	9,030	1.37	1.53
December	18,100	7,230	9,780	1.48	1.71
The year	72,000	5,220	13,800	2.09	2.848

NOTE.—Values for 1905 and 1906 are excellent.

SAVANNAH RIVER NEAR CALHOUN FALLS, SOUTH CAROLINA.

Systematic measurements were begun at this point August 4, 1896. The station is located at the Seaboard Air Line Railroad bridge, 3 miles west of Calhoun Falls, South Carolina, above the mouth of Beaver Dam Creek, at the head of Trotters Shoal, and about one-fourth mile below the mouth of Rocky River. The observer is Peter J. Pfeiffer, who reads the gage once daily. The station is also used by the United States Weather Bureau, which pays the gage reader.

The river is divided into two channels by a large island containing several hundred acres. Both channels are slightly curved for about 2,000 feet above the bridge and are straight for about 500 feet below. The west channel, which is the main river, is sluggish only at low water. It has a rough and rocky bed and in places the current is irregular.

The east channel is a good section, but has a low velocity. The right bank of the west channel and the left bank of the east channel are high and wooded and are not liable to overflow. The island between the channels is nearly covered at extreme high water. At low water the east channel is 150 feet wide and from 3 to 4 feet deep. The main channel is about 400 feet wide and from 2 to 8 feet deep.

Discharge measurements are made from the upstream side of the railroad bridge, to which the gage is attached. This bridge consists of one short span 175 feet in length across the east channel and three spans of 155 feet each across the west, or main channel. These two sections are connected by 875 feet of a wooden trestle, from 35 to 45 feet high, which crosses the island between the two channels. The base of the rail is about 54 feet above low water. The initial point for soundings is the left-bank end of the iron bridge on the up-stream side. A separate initial point has been used for each channel, the description being the same in both cases.

The chain gage is bolted to the downstream guard rail, 185 feet from the initial point for soundings. The length of the chain from the index to the end of weight is 57.10 feet.

Bench mark No. 1 is the top of the iron girder under the crossties of the downstream side of the bridge at a point 40 feet west of the second pier from the east end of the bridge; elevation, 54 feet above the gage datum. Bench mark No. 3 is a copper plug set in solid rock on the east bank of the east channel, 15 feet from the edge of the water and 110 feet upstream from the center of the railroad track; elevation, 14.38 feet above gage datum. The station was discontinued December 31, 1903.

Gage heights and monthly estimates of flow for 1901 and 1902, previously published for this station, are considered unreliable and hence are not republished in this paper.

Discharge measurements of Savannah River near Calhoun Falls, S. C.

Date	Gage height	Discharge	Date	Gage height	Discharge
1896	*Feet*	*Sec.-ft.*	1900	*Feet*	*Sec.-ft.*
August 4	2.40	2,668	March 1	5.47	13,800
September 22	1.77	1,531	1901		
October 31	2.10	2,054	January 21	3.15	5,331
1897			April 25	4.60	10,430
January 20	2.90	4,204	August 13	4.55	10,840
April 28	3.21	6,446	1902		
June 12	2.80	4,469	July 19	2.50	2,517
September 29	1.90	1,698	October 1	3.45	6,844
November 3	2.92	3,812	1903		
1898			March 20	4.15	9,769
April 16	2.75	4,081	May 7	3.60	7,108
1899			June 10	4.75	10,900
March 4	4.77	12,080	August 13	2.80	3,823
May 16	3.45	5,258	September 15	2.52	3,209
September 28	2.30	2,057	October 28	2.33	2,534
November 10	2.25	2,039	December 8	2.12	2,098

Daily gage height, in feet, of Savannah River near Calhoun Falls, S. C.

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Day	Aug.	Sept.	Oct.	Nov.	Dec.
1896						1896					
1	.....	2.0	2.0	2.2	5.6	17	2.1	2.0	1.95	3.0	3.4
2	.....	1.9	1.95	2.15	5.0	18	2.05	1.95	1.9	2.9	3.1
3	.....	1.85	1.9	2.05	4.95	19	2.05	1.9	1.85	2.65	3.0
4	2.4	1.8	1.95	3.0	5.15	20	2.0	1.85	1.8	2.4	2.85
5	2.3	1.95	1.9	5.65	5.0	21	1.9	1.8	1.8	2.25	2.8
6	2.15	3.85	1.85	7.15	4.05	22	1.85	1.7	1.75	2.35	2.75
7	2.1	3.0	1.9	4.75	3.5	23	1.8	2.5	1.75	2.3	2.65
8	2.0	2.4	1.75	3.0	3.75	24	1.75	2.4	2.15	2.3	2.6
9	2.05	2.4	1.7	2.6	3.05	25	1.75	2.35	2.05	2.3	2.55
10	2.1	2.25	1.7	2.45	3.2	26	2.0	2.25	2.0	2.25	2.5
11	2.05	2.2	2.0	2.3	2.95	27	2.45	2.0	1.95	2.25	2.45
12	2.0	2.3	2.25	2.2	2.6	28	2.0	1.9	1.9	2.2	2.4
13	1.95	2.15	2.5	5.6	2.45	29	1.95	1.95	1.85	2.3	2.4
14	2.8	2.1	2.4	4.1	2.55	30	1.0	2.0	1.95	2.95	2.4
15	2.1	2.05	2.15	3.6	3.25	31	1.85	.....	2.1	.....	2.35
16	2.3	2.0	2.0	3.25	3.2						

Daily gage height, in feet, of Savannah River near Calhoun Falls, S. C.—Contin'd.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897												
1	2.5	2.8	3.0	5.4	3.8	2.2	2.8	2.5	2.2	1.8	2.55	2.8
2	2.4	5.2	2.95	6.9	5.65	2.15	2.65	2.4	2.4	1.8	3.4	2.7
3	2.4	4.0	2.8	5.2	4.3	3.05	2.55	2.35	2.3	1.85	3.05	2.85
4	2.4	3.6	2.8	4.75	3.95	4.4	2.4	2.25	2.25	1.85	2.7	3.0
5	2.35	3.25	2.75	11.65	3.85	4.1	2.3	2.1	2.05	1.8	2.55	2.9
6	2.35	6.0	2.65	13.35	3.8	3.1	3.05	2.65	2.0	1.75	2.45	2.75
7	2.3	8.55	6.8	8.15	3.7	2.95	2.5	2.95	1.95	1.75	2.35	2.7
8	2.25	7.2	4.65	4.95	3.65	3.05	2.4	2.9	1.95	1.7	2.25	2.6
9	2.25	5.05	4.2	4.05	3.4	3.25	2.65	2.7	1.9	1.65	2.2	2.55
10	2.25	4.1	4.0	4.0	3.25	3.05	2.45	2.6	1.85	1.75	2.2	2.55
11	2.2	3.85	4.4	4.15	3.15	2.95	2.5	2.4	1.8	2.25	2.15	2.5
12	2.2	5.15	5.5	4.1	3.05	2.8	2.55	2.3	1.8	2.65	2.1	2.4
13	2.3	4.4	7.75	4.0	3.0	3.0	3.25	2.25	1.85	2.4	2.1	2.35
14	3.05	4.1	7.25	3.95	3.05	2.85	2.65	2.2	1.8	2.25	2.05	2.95
15	2.75	4.0	6.0	3.95	3.1	2.8	2.55	2.15	1.8	2.2	2.0	2.8
16	2.6	4.05	5.2	3.85	3.15	3.0	2.45	2.2	1.75	2.15	2.0	2.7
17	2.55	3.95	4.15	3.8	3.1	3.05	2.5	2.25	1.75	2.1	2.05	2.65
18	3.35	3.8	3.85	3.75	3.05	2.95	3.9	2.2	1.7	2.15	2.0	2.55
19	3.1	3.65	3.5	3.65	3.0	2.85	3.3	2.3	1.7	2.4	2.0	2.5
20	2.9	3.7	4.0	3.5	2.95	2.8	3.1	2.25	1.75	3.05	1.95	2.45
21	5.4	3.5	5.35	3.4	2.9	2.7	4.05	2.2	1.75	2.6	1.95	2.5
22	3.95	3.35	4.4	3.35	2.9	2.65	3.45	2.7	1.85	2.4	1.9	2.65
23	3.6	4.05	4.1	3.3	2.85	2.55	3.0	2.6	2.75	2.35	1.9	2.6
24	3.2	3.8	4.0	3.25	2.75	2.55	2.75	2.4	2.25	2.3	1.85	2.55
25	3.1	4.0	3.9	3.25	2.7	2.45	2.65	2.3	2.05	2.25	1.85	2.5
26	3.0	3.9	3.65	3.3	2.6	2.5	2.95	2.25	2.0	2.3	2.0	2.9
27	2.95	3.45	3.05	3.25	2.55	2.4	3.5	2.2	2.0	2.25	3.25	2.4
28	2.95	3.2	3.4	3.2	2.4	2.3	3.0	2.15	1.95	2.2	3.05	2.4
29	2.9	.....	3.25	3.25	2.35	3.5	2.9	2.1	1.9	2.2	2.95	2.35
30	2.9	.....	3.25	3.4	2.25	2.95	2.7	2.0	1.85	2.15	2.85	2.35
31	2.75	.....	3.3	.....	2.2	.....	2.55	2.05	.....	2.1	.....	2.3
1898												
1	2.3	3.25	2.3	4.6	2.65	1.8	1.75	3.2	.....	.....	.....	.....
2	2.3	3.1	2.35	3.4	2.75	1.8	1.7	3.0	.....	.....	.....	.....
3	2.25	3.0	2.45	3.25	2.8	1.8	1.65	3.6	.....	.....	.....	.....
4	2.25	2.9	2.8	3.0	2.8	1.75	1.6	3.0	.....	.....	.....	.....
5	2.2	2.85	3.0	4.45	2.75	1.95	1.9	2.75	.....	.....	.....	.....
6	2.4	2.8	2.8	4.0	2.7	2.05	2.45	2.5	.....	.....	.....	.....
7	2.35	2.75	2.65	3.8	2.6	2.0	2.75	5.05	.....	.....	.....	.....
8	2.3	2.65	2.6	3.55	2.55	1.95	3.95	4.4	.....	.....	.....	.....
9	2.25	2.6	2.5	3.2	2.5	1.85	3.05	a 3.25	.....	.....	.....	.....
10	2.25	2.6	2.45	3.0	2.5	1.8	2.6	.....	.....	.....	.....	.....
11	2.2	2.55	2.35	3.15	2.4	1.75	2.45	.....	.....	.....	.....	.....
12	2.2	2.6	2.25	3.05	2.25	1.75	2.3	.....	.....	.....	.....	.....
13	2.15	2.5	2.2	3.0	2.15	1.95	2.5	.....	.....	.....	.....	.....
14	2.15	2.5	2.25	3.0	2.0	1.9	4.9	.....	.....	.....	.....	.....
15	2.2	2.45	2.5	2.9	2.2	1.9	5.05	.....	.....	.....	.....	.....
16	2.4	2.4	2.4	2.7	2.1	1.95	3.95	.....	.....	.....	.....	.....
17	2.35	2.35	2.45	2.65	2.05	2.0	3.6	.....	.....	.....	.....	.....
18	2.35	2.3	2.35	2.55	2.0	2.05	3.4	.....	.....	.....	.....	.....
19	2.45	2.3	2.3	2.5	2.05	2.25	3.25	.....	.....	.....	.....	.....
20	2.85	2.3	2.3	2.65	2.0	2.35	3.0	.....	.....	.....	.....	.....
21	2.7	2.35	2.3	2.5	1.9	2.05	2.85	.....	.....	.....	.....	.....
22	2.65	2.3	2.25	2.45	2.0	2.0	2.5	.....	.....	.....	.....	.....
23	2.9	2.3	2.2	2.35	1.95	1.95	2.75	.....	.....	.....	.....	.....
24	2.85	2.25	2.25	2.75	1.95	1.9	4.0	.....	.....	.....	.....	.....
25	3.65	2.25	2.25	3.0	1.9	1.85	4.5	.....	.....	.....	.....	.....
26	5.5	2.25	2.2	2.85	1.85	1.9	4.05	.....	.....	.....	.....	.....
27	4.65	2.35	2.2	3.05	1.85	1.85	3.85	.....	.....	.....	.....	.....
28	4.05	2.4	2.25	2.9	1.8	1.8	4.0	.....	.....	.....	.....	.....
29	3.85	.....	2.3	2.8	1.8	1.8	3.75	.....	.....	.....	.....	.....
30	3.6	.....	3.9	2.7	1.85	1.8	3.9	.....	.....	.....	.....	.....
31	3.45	.....	6.75	.....	1.8	.....	3.65	.....	.....	.....	.....	.....

a Discontinued August 9, 1898, and reestablished March 4, 1899.

Daily gage height, in feet, of Savannah River near Calhoun Falls, S. C.—Contin'd.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1899												
1	.....	.....	.....	6.6	4.0	3.3	3.2	3.3	3.0	2.2	2.6	2.7
2	.....	.....	.....	5.0	3.9	3.2	3.0	3.1	2.9	2.1	2.5	2.8
3	.....	.....	.....	4.85	3.8	3.2	2.9	3.0	2.9	2.1	2.5	2.9
4	.....	.....	4.75	4.9	3.8	3.2	2.7	2.9	2.8	2.2	2.4	2.7
5	.....	.....	4.95	4.75	3.7	3.1	2.7	2.8	2.7	2.4	2.4	2.6
6	.....	.....	4.65	4.7	3.9	3.0	2.6	2.7	2.9	3.0	2.4	2.6
7	.....	.....	4.4	4.75	3.9	2.9	2.7	2.6	2.9	2.8	2.5	2.6
8	.....	.....	4.35	4.65	3.8	3.0	2.7	2.6	3.0	3.9	2.4	2.5
9	.....	.....	4.25	5.6	3.8	3.3	3.0	3.0	3.0	3.5	2.3	2.5
10	.....	.....	4.2	5.1	3.7	3.2	2.9	2.9	2.9	3.2	2.2	2.4
11	.....	.....	4.05	4.95	3.7	3.4	2.8	2.8	3.2	3.0	2.2	2.5
12	.....	.....	3.9	4.8	3.7	3.5	2.8	2.8	3.0	2.7	2.1	4.9
13	.....	.....	4.0	4.7	3.6	5.0	2.7	2.7	3.0	2.5	2.1	5.0
14	.....	.....	4.0	4.5	3.6	3.9	2.6	2.7	2.9	2.4	2.0	3.8
15	.....	.....	5.25	4.3	3.5	3.7	2.5	2.6	2.9	2.3	2.1	3.5
16	.....	.....	13.6	4.0	3.4	3.6	2.4	2.6	2.8	2.4	2.1	3.3
17	.....	.....	9.0	3.9	3.4	3.6	2.4	2.6	2.7	2.4	2.1	3.1
18	.....	.....	6.9	3.7	3.4	3.5	2.3	2.6	2.6	2.3	2.0	3.0
19	.....	.....	7.0	3.7	3.5	3.3	2.4	2.5	2.6	2.3	2.0	3.0
20	.....		9.9	3.5	3.5	3.2	2.3	2.5	2.9	2.4	2.0	2.9
21	.....	.....	7.05	3.4	3.4	3.1	2.2	2.6	2.9	2.3	2.1	2.9
22	.....	.....	5.0	3.2	3.5	3.0	2.3	2.8	2.8	2.3	2.1	2.8
23	.....	.....	5.0	3.0	3.7	3.0	2.3	3.0	2.6	2.3	2.3	2.7
24	.....	.....	4.9	2.9	3.55	2.9	2.3	2.9	2.5	2.2	2.3	3.9
25	.....	.....	5.0	4.0	3.5	2.9	2.4	2.7	2.4	2.2	2.4	3.8
26	.....	.....	5.1	4.6	3.4	3.0	2.7	2.7	2.6	2.2	4.0	3.5
27	.....	.....	4.95	5.1	3.25	3.9	2.7	2.8	2.4	2.1	3.4	3.5
28	.....	.....	4.85	5.0	3.2	4.0	5.0	3.0	2.3	2.1	3.2	3.6
29	.....	.....	6.95	4.7	3.2	3.6	3.5	2.9	2.3	2.2	2.9	3.7
30	.....	.....	5.1	4.1	3.1	3.3	3.6	3.5	2.2	2.3	2.8	3.6
31	.....	.....	7.0	.....	3.3	.....	3.4	3.2	.....	2.5	.....	2.9
1900												
1	3.3	2.9	5.3	3.6	4.0	2.8	3.6	3.2	3.2	2.1	2.9	3.0
2	3.2	2.8	6.5	3.5	3.9	2.7	3.2	3.0	3.7	2.0	3.0	2.9
3	3.2	2.8	4.6	3.5	4.2	3.1	3.0	3.0	3.3	2.0	3.9	2.8
4	3.1	2.7	4.2	3.7	4.0	2.9	3.0	2.9	3.0	2.1	4.3	3.9
5	3.0	2.8	3.9	3.6	3.9	3.5	2.9	2.9	3.0	2.1	4.0	3.8
6	3.0	2.8	3.8	3.4	3.7	3.4	2.9	2.8	2.9	3.0	3.8	3.8
7	2.9	2.9	3.6	3.3	3.6	3.9	2.8	2.8	2.8	2.7	3.7	3.7
8	2.9	2.9	4.0	3.4	3.4	11.0	2.7	2.7	2.6	2.6	3.4	3.6
9	2.9	3.0	4.9	3.4	3.3	5.0	2.7	2.6	2.5	2.5	3.3	3.4
10	3.0	3.2	4.3	3.3	3.1	3.5	2.6	2.4	2.3	2.4	3.2	3.4
11	3.2	5.2	3.9	3.6	3.1	3.0	2.5	2.3	2.2	2.4	3.2	3.3
12	4.0	9.3	3.8	4.0	3.0	3.0	2.4	2.2	2.1	2.6	3.0	3.3
13	3.9	15.5	3.6	3.8	3.0	3.1	2.4	2.7	2.0	3.9	2.9	3.4
14	3.7	19.4	3.4	3.6	3.0	3.0	2.5	2.6	2.0	3.0	2.7	3.7
15	3.6	8.0	3.3	3.6	2.9	3.0	2.4	2.5	4.7	2.9	2.7	3.6
16	3.5	5.5	4.6	3.5	2.9	3.3	2.3	2.5	6.9	2.8	2.6	3.4
17	3.3	4.9	4.5	3.5	2.9	5.6	2.2	2.6	5.0	2.6	2.6	3.4
18	3.3	4.7	4.0	3.9	2.8	6.1	2.2	2.6	3.2	2.5	2.6	3.3
19	3.4	4.4	3.8	5.0	3.0	4.9	2.1	2.4	3.0	2.5	2.6	3.8
20	3.9	4.3	4.2	5.1	3.0	4.0	2.1	2.3	2.9	2.4	3.0	3.6
21	3.8	4.2	4.0	8.0	2.9	3.7	2.1	2.2	2.9	2.4	2.9	3.7
22	3.6	5.4	3.9	10.4	2.9	3.6	2.0	2.0	2.7	2.4	2.8	3.5
23	3.5	4.7	3.8	5.5	3.0	4.0	2.2	2.0	2.7	2.5	2.8	3.4
24	3.4	4.4	4.0	6.9	4.9	12.7	2.3	1.9	2.6	5.0	2.6	3.4
25	3.2	4.2	5.6	6.0	4.2	12.0	2.2	2.5	2.4	4.0	2.6	3.3
26	3.2	4.0	5.7	4.9	3.2	7.8	2.2	2.9	2.4	3.9	3.6	3.3
27	3.1	3.9	5.0	4.2	3.0	5.0	2.3	2.7	2.2	3.7	3.4	3.3
28	3.0	3.9	4.8	4.0	3.0	4.5	3.4	2.9	2.0	3.5	3.2	3.2
29	3.0	.....	4.2	4.2	2.9	3.9	3.2	2.3	2.0	3.3	3.1	3.2
30	3.0	.....	3.9	4.0	2.9	3.8	3.4	2.2	2.1	3.1	3.0	3.3
31	2.9	.....	3.7	.....	2.8	.....	3.1	2.1	.....	2.9	.....	3.3
1903												
1	4.0	4.2	10.4	5.2	3.8	3.6	3.5	3.1	2.9	2.6	2.3	2.0
2	4.0	3.8	7.1	4.5	3.7	5.5	3.5	3.0	2.8	2.5	2.2	2.1
3	4.4	3.9	4.9	4.0	3.7	4.4	3.6	3.0	2.8	2.5	2.2	2.1
4	4.4	6.3	4.4	3.9	4.0	4.6	3.9	3.1	2.8	2.4	2.3	2.2
5	4.2	8.1	4.2	4.0	3.9	4.8	3.7	3.2	2.7	2.4	2.6	2.2

Daily gage height, in feet, of Savannah River near Calhoun Falls, S. C.—Contin'd.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
6	4.1	6.4	4.1	3.9	3.7	7.0	3.8	3.4	2.7	2.4	2.5	2.3
7	4.1	5.9	4.1	3.9	3.6	15.3	4.8	3.2	2.6	2.5	2.3	2.2
8	4.0	12.7	4.0	4.0	3.5	8.0	4.0	3.1	2.6	2.5	2.2	2.2
9	3.9	9.4	4.3	5.9	3.5	4.9	4.1	3.0	2.5	2.7	2.2	2.2
10	3.9	5.3	4.2	4.5	3.5	4.0	3.9	3.0	3.0	2.6	2.2	2.3
11	4.1	7.3	4.0	4.1	3.4	3.5	4.0	3.1	2.9	2.6	2.1	2.2
12	4.4	11.2	6.3	4.0	3.4	4.0	4.1	3.2	2.8	2.5	2.1	2.2
13	4.3	6.4	5.9	5.1	3.3	3.8	4.0	3.3	2.6	2.5	2.2	2.3
14	4.1	4.6	4.6	12.9	3.3	3.7	4.2	3.4	2.7	2.4	2.2	2.2
15	3.9	4.4	4.4	9.5	3.4	3.6	4.0	3.2	3.4	2.4	2.1	2.2
16	3.8	5.3	4.4	5.0	3.5	3.5	3.8	3.1	4.2	2.5	2.1	2.1
17	3.7	9.5	4.3	5.4	3.4	3.5	3.7	3.5	4.0	2.6	2.1	2.1
18	3.6	8.4	4.2	5.0	3.3	3.4	3.5	5.5	3.5	3.0	2.2	2.2
19	3.6	6.6	4.2	5.0	3.4	3.2	3.3	6.9	3.2	2.8	2.2	2.2
20	3.6	5.4	4.3	4.9	3.4	3.0	3.2	4.5	3.0	2.6	2.7	2.3
21	3.6	4.9	4.5	4.9	3.3	3.2	3.1	4.0	3.0	2.5	2.4	2.4
22	3.7	4.5	5.9	4.8	3.3	3.1	3.0	3.7	2.9	2.4	2.3	2.3
23	3.6	4.3	11.1	4.7	3.2	3.0	3.0	3.3	2.9	2.4	2.2	2.2
24	3.5	4.1	14.5	4.5	3.2	3.1	3.1	3.1	2.8	2.3	2.2	2.2
25	3.3	4.0	8.7	4.3	3.1	3.0	2.9	3.1	2.8	2.2	2.1	2.2
26	3.2	3.7	6.9	4.0	3.0	3.0	2.9	3.0	2.8	2.2	2.1	2.1
27	3.1	3.8	4.7	3.9	3.0	3.2	2.9	3.0	2.7	2.1	2.0	2.2
28	3.3	7.0	4.4	3.9	3.1	3.5	2.8	2.9	2.7	2.2	2.0	2.2
29	3.4	.....	4.9	3.8	3.1	4.0	2.8	2.9	2.7	2.1	2.0	2.2
30	4.3	.....	9.1	3.8	3.4	3.6	2.9	3.0	2.6	2.1	2.0	2.1
31	3.3	.....	7.5	.....	3.5	.....	3.0	2.9	.....	2.3	.....	2.1

Rating tables for Savannah River, near Calhoun Falls, S. C.

AUGUST 4 TO NOVEMBER 28, 1896.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.75	1,460	2.00	1,850	2.30	2,450	2.60	3,060
1.80	1,575	2.10	2,050	2.40	2,670	2.70	3,280
1.90	1,700	2.20	2,250	2.50	2,870	2.80	3,500

NOVEMBER 29, 1896, TO DECEMBER 31, 1898.[b]

1.60	1,350	2.60	3,240	3.50	7,500	4.40	12,000
1.70	1,450	2.70	3,590	3.60	8,000	4.50	12,500
1.80	1,580	2.80	4,000	3.70	8,500	4.60	13,000
1.90	1,720	2.90	4,500	3.80	9,000	4.70	13,500
2.00	1,875	3.00	5,000	3.90	9,500	4.80	14,000
2.10	2,045	3.10	5,500	4.00	10,000	4.90	14,500
2.20	2,235	3.20	6,000	4.10	10,500	5.00	15,000
2.30	2,445	3.30	6,500	4.20	11,000	6.00	20,000
2.40	2,680	3.40	7,000	4.30	11,500	7.00	25,000
2.50	2,940						

[a] Above gage height 2.80 feet the following rating table (Nov. 29, 1896, to Dec. 31, 1898) should be used.
[b] Above gage height 2.80 feet the rating curve is a tangent, the difference being 500 per tenth.

Rating table for Savannah River, near Calhoun Falls, S. C.—Continued.

JANUARY 1 TO DECEMBER 31, 1899.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.00	1,830	3.10	3,790	4.40	9,476	7.50	23,240
2.10	1,910	3.20	4,160	4.60	10,364	8.00	25,460
2.20	1,990	3.30	4,598	4.80	11,552	8.50	27,680
2.30	2,090	3.40	5,036	5.00	12,140	9.00	29,900
2.40	2,190	3.50	5,480	5.20	13,028	9.50	32,120
2.50	2,340	3.60	5,924	5.40	13,916	10.00	34,340
2.60	2,490	3.70	6,768	5.60	14,840	10.50	36,560
2.70	2,680	3.80	6,812	5.80	15,692	11.00	38,780
2.80	2,870	3.90	7,256	6.00	16,580	12.00	43,220
2.90	3,145	4.00	7,700	6.50	18,800	13.00	47,660
3.00	3,420	4.20	8,588	7.00	21,020	14.00	52,100

[a] Above gage height 3.40 feet the rating curve is a tangent, the difference being 444 per tenth.

JANUARY 1 TO DECEMBER 31, 1900.[a]

1.40	1,175	2.90	3,500	4.40	9,990	8.00	25,650
1.50	1,260	3.00	3,900	4.50	10,425	8.50	27,825
1.60	1,350	3.10	4,335	4.60	10,860	9.00	30,000
1.70	1,445	3.20	4,770	4.70	11,295	9.50	32,175
1.80	1,545	3.30	5,205	4.80	11,735	10.00	34,350
1.90	1,650	3.40	5,640	4.90	12,165	11.00	38,700
2.00	1,760	3.50	6,075	5.00	12,600	12.00	43,050
2.10	1,870	3.60	6,510	5.20	13,470	13.00	47,400
2.20	1,990	3.70	6,945	5.40	14,340	14.00	51,750
2.30	2,120	3.80	7,380	5.60	15,210	15.00	56,100
2.40	2,280	3.90	7,815	5.80	16,080	16.00	60,450
2.50	2,470	4.00	8,250	6.00	16,950	17.00	64,800
2.60	2,690	4.10	8,685	6.50	19,125	18.00	69,150
2.70	2,910	4.20	9,120	7.00	21,300	20.00	77,850
2.80	3,150	4.30	9,555	7.50	23,475		

[a] Above gage height 3.00 feet the rating curve is a tangent, the difference being 435 per tenth.

JANUARY 1 TO DECEMBER 31, 1903.[a]

2.00	1,870	2.80	3,980	3.60	6,910	4.40	10,060
2.10	2,050	2.90	4,280	3.70	7,300	4.50	10,470
2.20	2,250	3.00	4,640	3.80	7,690	4.60	10,890
2.30	2,470	3.10	5,000	3.90	8,080	4.70	11,310
2.40	2,710	3.20	5,390	4.00	8,470	4.80	11,740
2.50	2,980	3.30	5,770	4.10	8,860	4.90	12,170
2.60	3,280	3.40	6,150	4.20	9,280	5.00	12,600
2.70	3,600	3.50	6,530	4.30	9,660		

[a] Above gage height 5.00 feet this table is the same as the 1900 table.

Estimated monthly discharge of Savannah River near Calhoun Falls, S. C.

[Drainage area, 2,712 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1896					
August 4 to 31	5,500	1,525	2,126	0.78	0.81
September	9,250	1,460	2,360	.87	.97
October	2,870	1,460	1,821	.67	.77
November	26,000	1,950	5,644	2.08	2.32
December	18,000	2,560	6,468	2.38	2.75
1897					
January	17,000	2,235	4,456	1.64	1.89
February	32,750	4,000	11,366	4.19	4.36
March	23,750	3,420	10,950	4.04	4.66
April	56,750	6,000	13,342	4.92	5.49
May	15,000	2,235	6,010	2.22	2.56
June	12,000	2,140	4,698	1.73	1.93
July	10,250	2,445	4,307	1.59	1.83
August	4,750	1,875	2,654	.98	1.13
September	3,800	1,460	1,873	.69	.77
October	5,250	1,405	2,220	.82	.94
November	7,000	1,650	2,820	1.04	1.16
December	5,000	2,445	3,355	1.24	1.43
The year	56,750	1,405	5,671	2.09	28.15
1898					
January	17,500	2,140	4,500	1.66	1.91
February	6,250	2,340	3,231	1.19	1.24
March	23,750	2,235	3,638	1.34	1.54
April	13,000	2,560	5,396	1.99	2.22
May	4,000	1,580	2,399	.88	1.01
June	2,560	1,520	1,761	.65	.72
July	15,250	1,350	6,314	2.33	2.69
August 1 to 9	15,250	2,940	7,137	2.63	.88

Estimated monthly discharge of Savannah River, near Calhoun Falls, S. C.—Con.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1899					
March 4 to 31	50,324	7,256	15,185	5.60	5.83
April	19,244	3,120	9,632	3.55	3.96
May	7,700	3,770	5,798	2.14	2.47
June	12,140	3,120	4,922	1.81	2.02
July	12,140	1,990	3,184	1.17	1.35
August	5,480	2,330	3,031	1.12	1.29
September	4,160	1,990	2,870	1.06	1.18
October	7,256	1,910	2,549	.94	1.08
November	7,700	1,880	2,474	.91	1.01
December	12,140	2,190	4,434	1.63	1.88
1900					
January	8,250	3,500	3,961	1.46	1.68
February	75,240	2,910	13,362	4.93	5.14
March	19,125	5,205	9,485	3.50	4.04
April	36,090	5,205	10,048	3.70	4.13
May	12,165	3,150	5,235	1.93	2.23
June	46,095	2,910	11,427	4.21	4.69
July	6,510	1,760	3,019	1.11	1.28
August	4,770	1,660	2,700	1.00	1.15
September	20,865	1,760	4,230	1.56	1.74
October	12,600	1,760	3,819	1.41	1.63
November	9,555	2,690	4,531	1.67	1.86
December	7,815	3,150	5,659	2.09	2.41
The year	75,240	1,660	6,456	2.38	31.98
1903					
January	10,060	5,010	7,777	2.87	3.31
February	46,095	7,300	17,551	6.47	6.74
March	53,925	8,470	16,244	5.99	6.90
April	46,965	7,600	12,325	4.54	5.07
May	8,470	4,640	6,216	2.29	2.64
June	57,405	4,640	10,071	3.71	4.14
July	11,740	3,930	6,623	2.44	2.81
August	20,865	4,280	6,265	2.31	2.66
September	9,260	2,980	4,402	1.62	1.81
October	4,640	2,050	2,878	1.06	1.22
November	3,600	1,870	2,301	.85	.95
December	2,710	1,870	2,170	.80	.92
The year	57,405	1,870	7,902	2.91	39.17

SAVANNAH RIVER AT WOODLAWN, SOUTH CAROLINA

This station was established November 9, 1905, by M. R. Hall. It is located at the Charleston and Western Carolina Railway bridge, 1,000 feet from the depot at Woodlawn, South Carolina, 17 miles above Augusta, Georgia, and 10 miles above the Augusta water-power dam.

The flow is almost natural at this point, being affected very slightly by stored water, mostly from Seneca River. The river is divided by a low island into two channels. The east channel is the main part of the river, as there is very little water flowing in the west channel at ordinary stages and probably none at the lowest stage. The channel is practically straight at the station. The left

bank is high and will not overflow except under the short trestle approach. The island and the bank for a short distance west of the west channel will overflow. The current is swift and is good in the greater part of the section at low water, but at places it is broken and irregular or is sloping with the direction of the section. The bed of the stream is mostly rock, the considerable roughness of which causes the irregularities in the current above mentioned. Careful measurements should give good results at this station.

Discharge measurements are made from the upstream side of the railroad bridge, which is in four spans over the east channel and a single span over the west channel. Across the island between the two channels there is about 900 feet of wooden trestle.

The gage is a boxed chain gage, attached to the upstream end of the second floor beam from the left end of the bridge. The length of the chain is 39 feet. It is read twice each day by M. A. Palmore. The bench mark is the top of the upstream end of the second floor beam from the left end of the bridge; elevation, 37.00 feet above the datum of the gage.

Discharge measurements of Savannah River at Woodlawn, S. C., in 1905-6.

Date	Gage height	Discharge
1905	*Feet*	*Sec.-ft.*
November 9	3.49	3,220
November 21	3.31	3,060
1906		
March 6	5.52	8,940
March 7	5.30	8,400
April 26	5.04	7,680
June 29	4.52	6,150
August 21	8.65	21,200
October 30	5.30	8,540

Daily gage height, in feet, of Savannah River at Woodlawn, S. C.

Day	Nov.	Dec.	Day	Nov.	Dec.	Day	Nov	Dec.
1905			1905			1905		
1		3.65	12	4.1	6.9	22	4.0	14.0
2		3.6	13	3.8	5.6	23	3.75	9.8
3		5.9	14	3.45	5.4	24	3.55	7.3
4		12.1	15	3.55	5.8	25	3.	6.3
5		9.2	16	3.5	6.2	26	3.6	5.8
6		6.2	17	3.45	5.9	27	3.6	5.4
7		5.0	18	3.45	5.3	28	3.7	5.4
8		4.6	19	3.5	5.0	29	3.75	7.8
9	3.55	5.4	20	3.3	7.2	30	3.7	7.3
10	3.55	11.6	21	3.4	15.5	31		6.2
11	4.1	9.4						

Daily gage height, in feet, of Savannah River at Woodlawn, S. C., for 1906.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.0	6.8	5.0	8.1	5.25	4.6	4.4	9.7	9.2	10.8	5.8	5.1
2	5.6	6.4	4.9	7.0	5.2	4.2	6.2	8.4	7.2	9.4	5.2	5.0
3	5.8	6.2	4.95	6.6	5.05	4.5	5.6	8.1	6.4	10.6	5.2	5.0
4	16.5	6.1	5.1	6.2	5.2	5.65	6.4	7.4	6.0	13.4	5.2	5.05
5	18.6	5.9	6.5	6.0	5.5	6.7	7.6	7.4	6.3	12.1	5.2	4.9
6	12.6	5.7	5.6	5.95	5.4	5.6	5.8	6.8	7.0	9.8	5.15	4.9
7	8.0	5.8	5.3	5.8	6.8	5.05	5.0	6.1	6.3	9.2	5.1	5.1
8	6.8	6.0	5.8	5.7	7.0	4.7	5.2	5.7	6.0	8.2	5.1	5.2
9	6.3	6.8	8.8	5.7	6.2	4.5	9.4	5.4	5.5	7.3	5.05	5.0
10	6.2	6.4	7.6	6.2	5.3	4.55	8.8	5.35	5.35	7.0	5.0	5.0
11	5.8	6.0	6.4	6.2	5.0	4.9	6.6	5.35	5.2	6.8	5.0	6.2
12	8.1	6.0	5.8	5.8	4.9	5.1	5.75	5.3	6.8	6.4	5.0	7.9
13	8.4	5.95	5.35	5.5	4.8	9.7	5.5	5.5	9.2	6.3	5.05	6.3
14	7.1	6.1	6.4	5.5	4.85	11.3	5.1	6.6	7.7	6.2	5.05	5.7
15	6.4	5.8	11.4	6.4	4.65	10.0	5.15	6.4	6.0	6.1	5.1	5.4
16	6.1	5.65	14.6	7.2	4.65	12.0	11.2	6.3	5.55	6.0	5.3	5.2
17	6.1	5.45	12.2	6.3	4.6	12.4	10.0	6.2	5.2	6.0	5.3	5.2
18	6.0	5.3	8.3	5.75	4.5	9.9	10.1	6.1	7.5	6.0	5.2	5.35
19	5.7	5.3	8.2	5.7	4.5	7.7	11.3	6.9	10.1	6.8	6.3	7.0
20	5.6	5.2	16.7	5.4	4.5	6.2	9.6	7.8	12.6	7.5	8.4	7.2
21	5.7	5.5	15.6	5.4	4.45	5.5	8.4	8.8	12.1	6.4	6.9	7.2
22	5.5	6.2	10.3	5.3	4.4	5.2	7.3	7.6	8.6	6.0	6.1	6.5
23	14.0	6.1	7.6	5.2	4.4	4.95	7.6	6.4	7.3	5.85	5.75	5.9
24	19.2	5.5	6.8	4.85	4.5	4.75	6.8	6.0	7.6	5.8	5.6	5.6
25	13.2	5.3	6.5	5.1	4.5	4.8	7.6	5.8	7.7	5.65	5.4	5.4
26	11.6	5.2	6.2	5.0	4.4	4.7	7.7	5.2	7.7	5.6	5.3	5.3
27	12.4	5.1	6.1	5.0	7.0	4.7	6.2	6.8	7.4	5.55	5.3	5.3
28	11.4	5.0	7.1	5.45	7.5	4.7	5.9	7.4	6.7	5.45	5.25	5.25
29	9.4	.....	7.3	6.0	5.9	4.5	6.4	8.8	7.2	5.3	5.2	5.35
30	7.9	.....	7.6	5.6	5.1	4.5	7.1	8.3	8.6	5.3	5.15	5.65
31	7.1	.....	8.4	.....	4.8	.....	10.5	9.8	.....	5.3	.....	6.2

Rating table for Savannah River at Woodlawn, S. C., for 1905-6.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
3.00	2,440	4.40	5,760	5.80	10,160	8.40	20,120
3.10	2,640	4.50	6,040	5.90	10,510	8.60	20,940
3.20	2,850	4.60	6,330	6.00	10,860	8.80	21,760
3.30	3,060	4.70	6,630	6.20	11,568	9.00	22,600
3.40	3,280	4.80	6,930	6.40	12,280	10.00	27,000
3.50	3,500	4.90	7,230	6.60	13,010	11.00	31,600
3.60	3,730	5.00	7,540	6.80	13,760	12.00	36,300
3.70	3,960	5.10	7,850	7.00	14,520	13.00	41,100
3.80	4,200	5.20	8,170	7.20	15,300	14.00	46,000
3.90	4,450	5.30	8,490	7.40	16,080	15.00	51,000
4.00	4,700	5.40	8,810	7.60	16,880	16.00	56,000
4.10	4,960	5.50	9,140	7.80	17,680	17.00	61,000
4.20	5,220	5.60	9,480	8.00	18,480	18.00	66,000
4.30	5,490	5.70	9,820	8.20	19,300	19.00	71,000

NOTE.—The above table is based on seven discharge measurements made during 1905-6, and is well defined below gage height 8 feet. Above gage height 14 feet the rating curve is a tangent, the difference being 500 per tenth.

THE RAPIDS ON THE OCOEE RIVER NEAR THE GEORGIA-TENNESSEE STATE LINE. THE HAZINESS IN THE DISTANCE IS DUE TO SULPHUR FUMES FROM THE DUCKTOWN SMELTERS.

Monthly discharge for Savannah River at Woodlawn, S. C., for 1905-6.

[Drainage area, 6,600 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1905					
November 9-30	4,980	3,060	3,820	0.579	0.47
December	53,500	3,730	15,900	2.41	2.78
1906					
January	72,000	9,140	23,400	3.55	4.09
February	13,800	7,540	10,300	1.56	1.62
March	59,500	7,230	18,900	2.86	3.30
April	18,900	7,080	10,500	1.59	1.77
May	16,500	5,760	8,210	1.24	1.43
June	38,200	5,220	12,600	1.91	2.13
July	33,000	5,760	16,100	2.44	2.81
August	26,100	8,170	14,400	2.18	2.51
September	39,200	8,170	16,500	2.50	2.79
October	43,100	8,490	16,000	2.42	2.79
November	20,100	7,540	9,030	1.37	1.53
December	18,100	7,230	9,780	1.48	1.71
The year	72,000	5,220	13,800	2.09	28.48

NOTE.—Values for 1905 and 1906 are excellent.

SAVANNAH RIVER AT AUGUSTA

Since 1875 observations of river heights have been maintained at this station by the city of Augusta at the city highway bridge. The United States Weather Bureau has published the results of observations from 1875 to 1905 in a volume entitled "Stages of Water at River Stations."

The channel is straight for a long distance above and below the bridge and is about 560 feet wide at low water. The banks are high, but will overflow at times under a part of the length of the approaches and, at very high stages, for a long distance on either side of the river beyond the ends of the bridge. The bed of the stream is sandy and undergoes considerable change. The current is swift.

Discharge measurements are made from the downstream side of the North Augusta bridge at Thirteenth street in the city of Augusta. This bridge consists of three spans, each 208 feet long, with 319 feet of wooden approach on the right bank and 259 feet on the left. The initial point for soundings is the end of the bridge at the right bank on the downstream side.

The gage, located at the Fifth Street Bridge, 1 mile below the

measuring station, is a vertical timber fastened to the first bridge pier which is in the water on the side of the pier near the upstream corner, facing the right bank. Readings are made four times each day by J. M. Youngblood, keeper of the city bridge, usually 6 a. m., 12 m., 6 p. m., and 9 p. m. The 6 a. m. readings are those used by the Weather Bureau, but are liable to be very misleading, owing to the great diurnal fluctuation of the water surface, and should not be used for important work. In the publications of the United States Geological Survey since 1900 the average of all four of the daily readings is used and is reduced to feet and tenths of a foot. The zero of the gage is the datum of all the city levels, and any city bench mark can therefore be used. A point is established on the North Augusta bridge from which to measure down with a steel tape. This is the top of the plate through which the top pipe of the bridge fencing passes, which is riveted to the right side of the intermediate post at the down-stream end of the third floor beam from the right-bank end of the bridge, and at ordinary stages it is 55.00 feet above water, less the reading of the gage.

This station is located below all the wheels of the large developed water power belonging to the city of Augusta.

Water is diverted from the river above the city by a canal following along the right bank, described in Volume XVI of the Tenth Census, 1880, page 789. A measurement of the canal by B. M. Hall on September 29, 1897, above all the water wheels, showed a flow of 2,640 second-feet, presumably all of which was passing through the water wheels under varying heads. The full head is 50 feet, but the canal has three levels. Some of the wheels discharge from the upper level or main canal directly into the river, while others discharge from one level to another.

The highest water recorded was on September 11, 1888, at 38.7 feet. At that time the entire city was submerged, 10 persons were drowned, and property was damaged to the amount of $2,000,000.

The floods of this river have been investigated under the direction of the Corps of Engineers, United States Army, and reports prepared by George W. Brown, assistant engineer. The first of these, dated February 11, 1889, was printed, with maps, as House Ex-

Doc. No. 213, Fifty-first Congress, first session; it was also given, with few maps, in the Report of the Chief of Engineers, United States Army, 1890, page 1340. A later report, dated June 10, 1890, also prepared by Mr. George W. Brown, was printed as Ex. Doc. No. 255, Fifty-first Congress, second session. In this report is given a rating table, showing the probable discharge of the river at heights on the gage of from 5 to 40 feet. On page 17 of this latter document is shown the run-off in cubic feet per second per square mile for various portions of the drainage basin. A table of distances and elevations and slope of river, as well as a description of the character of the drainage basin, is also given.

From the figures in the above-named reports a computation was made by Cyrus C. Babb of the fluctuations of flow of Savannah River, the results being published in the Fourteenth Annual Report, Part II, of the United States Geological Survey, page 147, relating to the years 1884 to 1891, inclusive. A discussion of the results is also given in Transactions American Society of Civil Engineers, Volume XXIII, page 332.

By the use of a rating table Mr. Hall has computed the minimum flow, by months, from 1892 to 1898, inclusive. In each case he has taken the average of all the readings for the day of lowest water in the given month, and not the lowest single reading. The lowest average daily reading for the seven years is that on July 3, 1898, of 3.88.

Minimum monthly gage height and discharge of Savannah River at Augusta, for 1892 to 1898, inclusive.

Date	Gage height	Discharge	Date	Gage height	Discharge
1892	*Feet*	*Sec.-Ft.*	1895	*Feet*	*Sec.-Ft.*
January 2	7.80	6,820	July 21	6.66	5,905
February 7	8.55	8,328	August 3	5.90	3,910
March 6	8.25	7,698	September 30	5.40	3,436
April 30	8.63	8,502	October 26	5.08	3,125
May 2	7.30	5,922	November 2	5.20	3,268
June 30	7.53	6,368	December 8	5.40	3,436
July 17	6.76	5,083			
August 10	6.06	4,091	1896		
September 21	6.40	4,522	January 15	6.50	4,660
October 2	6.30	4,589	February 28	8.10	7,396
November 2	6.80	5,092	March 31	7.50	6,274
December 15	6.63	4,843	April 24	6.03	4,040
			May 23	5.30	3,352
1893			June 18	4.98	3,045
January 18	6.45	4,591	July 4	4.73	2,875
February 10	8.06	7,318	August 25	5.16	3,200
March 31	8.00	7,200	September 23	4.10	2,405
April 20	6.30	4,589	October 11	3.94	2,323
May 29	6.35	4,455	November 1	4.80	2,930
June 30	6.70	4,944	December 27	6.16	4,158
July 15	5.53	3,550			
August 26	5.23	3,296	1897		
September 26	6.86	5,200	January 12	6.00	4,020
October 31	6.06	4,091	February 1	7.40	6,098
November 21	5.73	3,735	March 6	9.20	9,804
December 15	6.30	4,589	April 29	8.60	8,436
			May 29	6.60	4,800
1894			June 27	6.00	4,020
January 6	7.10	5,572	July 4	5.65	3,655
February 4	7.76	6,760	August 31	5.40	3,436
March 31	8.13	7,456	September 15	4.55	2,738
April 28	7.23	5,810	October 10	3.93	2,330
May 31	6.36	4,484	November 14	5.00	3,100
June 18	5.33	3,380	December 12	5.85	3,860
July 16	5.23	3,296			
August 24	5.90	3,910	1898		
September 13	5.30	3,352	January 11	5.97	3,930
October 31	5.83	3,840	February 26	5.67	3,585
November 12	5.76	3,765	March 27	5.67	3,670
December 3	5.53	3,550	April 23	6.97	5,350
			May 29	4.92	3,032
1895			June 11	4.20	2,475
January 8	7.75	6,728	July 3	3.88	2,294
February 10	8.66	8,506	August 4	6.55	4,730
March 1	8.95	9,220	September 30	7.47	6,220
April 7	8.76	8,800	October 2	7.02	5,435
May 18	8.70	8,656	November 6	7.55	6,364
June 27	6.73	5,040	December 18	7.85	6,916

Discharge measurements of Savannah River at Augusta.

Date	Gage height	Discharge
	Feet	*Sec.-ft.*
1896		
October 3	5.41	3,154
1897		
July 15	6.67	4,198
September 9	5.17	3,180
November 6	6.20	4,311
1898		
April 28	11.55	14,490
June 16	5.25	3,393
July 27	9.85	11,380
July 28	10.37	14,280
August 2	7.17	6,302
August 3	6.72	5,511
September 3	28.27	87,470
September 16	8.10	7,432
September 17	8.00	7,108
November 14	11.68	13,240
1899		
March 17	25.20	60,720
March 18	20.60	35,970
May 8	9.70	10,860
May 9	9.50	9,908
May 29	7.60	6,271
July 1	7.22	5,391
August 3	6.68	4,226
October 10	12.48	14,610
1900		
August 28	7.30	5,968
1901		
January 19	11.65	13,040
February 21	8.55	7,664
1901		
April 4	32.10	127,100
August 10	10.00	9,720
1902		
June 20	8.85	7,497
July 25	7.85	5,246
September 5	7.90	5,239
1903		
June 10	15.10	17,740
September 29	7.13	3,831
December 8	7.20	3,898
1904		
February 5	7.50	4,714
February 15	8.70	6,714
April 7	7.96	5,647
July 14	6.45	3,826
August 10	24.57	55,680
October 9	5.77	3,068
October 18	5.07	2,057
1905		
March 29	7.72	5,333
April 12	8.04	5,867
June 7	7.85	5,092
October 13	10.10	9,882
October 14	7.78	5,204
November 22	6.70	4,365
1906		
March 8	9.42	8,640
April 27	8.89	7,200
August 20	13.92	20,000
October 29	9.44	8,400

Daily gage height, in feet, of Savannah River at Augusta.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1899 *a*												
1	8.5	12.7	28.8	19.5	9.6	7.9	7.2	7.4	13.9	5.0	6.2	7.3
2	10.8	13.0	21.0	18.9	9.5	8.4	6.7	6.7	10.9	5.0	6.4	6.9
3	10.3	14.3	16.2	15.3	9.3	7.6	6.2	6.3	9.1	5.5	6.3	5.8
4	9.0	15.8	14.2	13.2	9.3	7.5	6.0	6.3	8.0	5.6	5.8	7.0
5	8.5	14.5	13.7	12.9	9.2	7.2	6.0	6.0	7.5	5.8	5.6	8.7
6	8.5	20.7	16.2	13.0	9.8	7.3	6.0	5.9	6.9	11.8	5.8	6.7
7	12.8	28.0	15.2	12.2	10.3	7.8	5.8	5.7	6.6	9.6	5.9	6.3
8	22.9	31.0	13.3	12.4	10.4	7.0	6.7	5.5	7.4	10.5	5.8	6.3
9	19.2	29.9	12.2	15.5	9.7	7.0	7.0	5.7	7.0	14.1	5.9	6.1
10	14.3	22.9	11.8	14.2	9.1	6.9	8.3	6.0	7.0	12.1	5.8	6.0
11	12.8	18.3	11.5	12.8	8.8	7.3	7.8	5.7	8.7	8.5	5.5	5.9
12	17.3	14.7	11.2	12.0	8.5	6.9	6.5	8.0	9.3	7.3	5.6	5.9
13	17.4	13.7	11.2	11.5	8.5	7.5	6.0	8.3	8.6	6.9	5.6	6.3
14	15.3	12.9	11.1	11.2	8.5	9.7	6.0	6.4	6.9	6.4	5.7	10.7
15	15.4	12.3	11.0	11.0	8.3	9.7	6.0	6.0	6.3	6.0	6.1	14.5
16	14.5	14.4	18.8	10.8	8.2	8.2	6.0	5.5	5.8	6.3	5.8	10.5
17	17.3	25.0	25.5	10.5	8.2	8.0	5.7	5.4	5.6	6.0	5.8	8.5
18	16.8	24.3	21.5	10.5	8.0	8.7	5.6	5.0	5.2	6.0	5.8	7.5
19	13.9	19.1	17.1	10.2	8.0	7.9	5.8	5.0	5.4	6.3	5.4	7.3
20	11.7	15.3	20.0	10.5	7.9	7.3	5.7	5.8	5.7	6.1	5.7	7.0
21	10.7	13.5	22.5	10.4	7.9	7.3	5.5	4.0	6.0	6.5	5.7	6.8
22	10.0	14.7	17.1	10.0	7.8	7.0	5.3	4.7	6.6	6.7	5.8	6.9
23	9.9	14.3	15.8	9.9	7.7	6.7	5.8	5.3	6.0	6.0	5.8	7.4
24	11.4	13.0	15.5	9.6	8.2	6.7	5.8	4.8	5.4	6.0	7.0	9.3
25	11.9	11.7	15.5	10.0	8.0	6.5	5.7	5.7	5.9	5.8	8.3	13.8
26	10.8	11.5	13.8	11.5	7.8	6.3	6.0	5.6	5.6	5.8	9.2	12.3
27	10.3	17.7	14.5	13.0	7.6	6.7	7.0	7.0	5.3	5.6	11.3	9.8
28	10.0	29.6	13.0	11.2	7.4	7.5	11.7	13.3	5.8	5.7	9.8	8.3
29	11.0	.....	14.0	10.3	7.4	7.7	11.6	11.3	5.8	5.6	8.4	5.0
30	11.2	.....	15.5	10.0	7.4	7.5	9.3	9.2	5.6	5.8	7.5	8.3
31	10.5	.....	13.0	.....	7.3	.....	8.5	11.4	.....	5.9	.....	7.7

a For the months of September, October, and November, 1899, the figures given are an average of four readings daily—6 a. m., 12 m., 6 p. m., and 8 p. m. For the other months the readings are those taken at 6 a. m.

Daily gage height, in feet, of Savannah River at Augusta.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900. [a]												
1	7.12	6.87	17.37	9.98	11.5	7.7	14.46	11.29	7.37	6.18	7.2	7.95
2	6.24	6.81	23.12	9.89	11.2	7.5	12.9	9.46	7.79	6.38	7.3	7.5
3	6.67	6.44	13.87	9.54	10.7	7.5	12.25	8.3	8.35	6.38	7.7	7.75
4	6.42	6.52	14.06	9.54	12.3	8.3	11.66	7.76	7.33	6.16	13.8	9.18
5	6.5	8.33	11.44	9.65	10.6	10.2	10.6	7.73	7.0	6.4	12.0	15.31
6	6.67	9.1	10.6	9.63	9.6	9.5	9.62	7.33	6.85	6.65	9.3	14.44
7	6.39	8.89	10.37	9.2	9.3	11.7	9.27	7.27	6.44	7.65	8.0	11.22
8	6.65	8.08	10.64	9.0	9.0	19.7	8.96	7.19	6.2	7.41	7.7	9.32
9	6.71	8.12	17.35	8.75	9.0	19.9	8.79	7.13	6.27	7.35	7.5	8.5
10	6.71	10.04	17.6	8.9	8.8	19.9	8.39	7.09	5.89	7.5	7.4	8.4
11	7.12	20.58	14.35	9.15	8.7	10.8	8.52	7.06	6.16	6.3	6.9	8.06
12	10.4	27.19	12.21	11.1	8.6	9.5	8.22	6.57	6.06	6.75	7.0	7.9
13	15.0	29.6	10.96	11.35	8.4	9.2	8.68	6.62	6.08	6.85	7.1	7.8
14	12.79	32.31	10.39	10.77	8.3	9.3	8.94	7.31	5.99	7.48	7.0	8.8
15	9.37	30.08	10.08	9.47	8.3	9.9	9.6	7.17	7.4	7.14	7.0	11.56
16	8.65	22.08	15.25	9.16	8.2	9.7	9.37	6.77	14.49	6.62	6.8	9.81
17	8.12	16.29	17.27	8.88	7.8	15.0	8.64	7.67	14.24	6.56	6.8	8.6
18	7.67	12.75	14.21	12.15	8.4	19.8	8.37	7.27	10.6	6.47	6.5	7.97
19	7.94	11.39	11.42	23.89	9.7	18.4	8.19	6.78	8.35	6.45	6.8	7.44
20	8.94	10.46	13.68	24.7	11.0	13.5	8.04	6.82	7.7	6.27	7.2	8.15
21	10.26	10.35	15.25	24.25	10.6	10.7	7.89	6.62	7.27	5.95	7.5	12.1
22	10.44	14.79	13.7	26.73	8.9	9.6	7.39	6.48	7.12	6.3	7.4	12.7
23	9.11	15.44	11.85	24.73	8.4	11.7	8.0	6.5	6.92	6.32	7.3	11.12
24	8.44	12.89	11.73	18.27	10.4	21.8	8.2	6.56	6.35	12.66	7.4	9.35
25	8.12	12.96	14.10	14.75	13.0	29.2	8.92	6.77	6.75	16.72	7.0	9.4
26	7.96	12.37	19.65	17.08	11.0	26.8	8.32	7.77	6.5	12.3	10.0	9.2
27	7.73	10.98	18.37	13.73	9.1	23.0	9.23	7.12	6.67	10.6	14.9	8.72
28	7.19	10.31	14.79	12.5	8.5	19.6	11.12	7.2	6.46	9.72	11.8	8.4
29	7.22	.....	12.67	11.81	8.1	16.7	10.2	6.69	6.5	8.52	9.1	8.25
30	7.2	.....	11.46	11.2	7.9	14.6	11.88	6.62	6.19	7.95	8.3	8.4
31	7.08	.....	10.69	.....	7.8	.....	13.35	7.08	.....	7.6	.....	15.22
1901. [a]												
1	15.2	10.4	8.3	14.0	10.1	14.1	12.2	8.3	18.4	10.8	8.4	8.2
2	15.28	9.5	8.2	14.7	10.0	13.3	11.6	7.8	18.2	11.9	8.4	8.4
3	17.3	10.0	8.0	30.3	9.8	11.4	9.9	7.4	15.0	12.2	8.3	8.2
4	15.12	25.6	8.2	30.9	9.5	10.1	8.9	7.2	12.8	12.1	8.5	8.9
5	12.4	26.7	8.1	23.8	9.4	9.8	8.8	7.3	11.4	10.1	8.4	9.9
6	10.28	20.4	8.0	18.5	9.3	9.8	8.5	7.7	10.8	9.4	8.7	9.1
7	9.37	16.1	8.0	14.3	9.3	15.0	8.3	12.9	10.4	9.3	8.5	8.6
8	8.95	12.7	7.8	12.7	9.3	15.7	8.6	18.9	10.0	9.1	8.4	8.6
9	8.62	14.0	7.8	11.6	9.2	12.1	9.0	13.2	9.9	9.2	8.5	8.6
10	8.55	17.3	8.1	11.0	9.0	9.6	8.9	10.0	9.8	8.9	8.3	8.4
11	8.55	15.3	10.1	10.6	8.8	9.0	8.7	9.2	9.7	8.7	8.4	8.5
12	17.12	12.7	14.9	10.3	8.5	9.1	8.2	12.0	10.0	8.8	8.5	9.1
13	23.45	11.6	11.8	10.5	8.6	10.4	7.7	10.6	9.8	11.2	8.7	8.9
14	19.18	10.7	9.8	17.6	8.7	21.7	8.1	11.3	9.6	12.0	8.4	8.9
15	14.65	10.2	8.9	18.6	8.6	26.9	8.4	18.1	9.3	10.8	8.5	14.8
16	11.8	9.8	8.6	14.9	8.5	28.2	9.2	19.8	9.2	9.1	8.5	23.1
17	11.9	9.3	8.2	12.4	8.5	23.0	8.7	22.4	10.7	9.0	8.2	17.2
18	13.3	9.2	8.2	11.3	8.3	17.8	9.3	21.8	28.5	8.9	8.5	12.4
19	11.55	9.1	8.0	11.7	8.9	14.8	9.7	19.7	30.9	8.6	8.4	10.7
20	9.87	8.9	8.0	19.6	15.1	12.1	13.3	17.9	25.5	8.4	8.4	9.9
21	9.48	8.6	8.0	23.6	20.8	11.0	12.4	15.8	17.1	8.2	8.5	9.3
22	9.05	8.6	8.7	18.2	25.6	11.2	9.8	17.0	13.1	8.4	8.6	9.2
23	9.0	8.6	9.4	14.8	27.0	11.7	9.0	20.2	11.5	8.4	8.6	9.1
24	9.07	8.6	8.6	13.3	10.6	12.2	8.2	24.0	10.7	8.6	8.4	9.6
25	10.28	8.7	8.9	12.4	15.0	11.7	8.0	21.6	10.2	8.7	8.8	10.2
26	10.32	8.7	15.1	11.7	13.5	11.8	8.0	16.8	10.0	8.5	8.6	9.9
27	9.47	8.7	27.7	11.2	14.0	11.0	10.0	13.9	9.7	8.5	8.5	9.7
28	9.12	8.4	28.0	10.8	11.9	10.2	9.8	22.0	9.3	8.6	8.4	13.3
29	9.05	.....	20.3	10.5	11.1	10.8	9.3	28.7	9.8	8.3	8.4	23.1
30	8.96	.....	14.8	10.2	10.4	10.9	9.1	26.1	10.7	8.4	8.3	29.6
31	9.85	.....	14.4	.....	10.8	.....	8.4	21.4	.....	8.6	.....	30.4

[a] Mean of four daily readings.

Daily gage height, in feet, of Savannah River at Augusta.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1902 *a*												
1	23.9	19.3	33.3	18.6	9.8	8.3	7.3	7.8	7.7	8.7	7.5	11.3
2	16.6	29.5	33.3	14.5	10.6	8.5	7.2	8.1	7.4	9.9	7.2	13.2
3	13.6	32.4	28.6	13.1	10.8	8.9	7.1	9.0	7.3	9.2	7.1	17.4
4	12.4	28.5	21.5	12.8	10.2	8.5	7.0	8.5	7.2	8.5	7.3	21.1
5	11.5	21.1	17.4	12.5	9.9	8.4	6.9	7.8	7.3	9.2	7.1	17.4
6	11.0	15.6	15.1	12.0	9.8	8.3	6.8	7.7	7.7	10.9	7.4	14.3
7	10.5	13.2	13.9	12.0	9.7	8.3	6.9	7.7	7.1	10.3	7.5	11.8
8	10.5	12.2	13.2	13.4	9.4	8.5	7.0	7.6	7.1	8.7	9.2	10.5
9	10.4	11.6	12.7	13.6	9.6	8.8	7.4	7.2	7.1	8.3	8.3	9.5
10	10.2	11.0	13.1	12.3	10.1	8.6	8.0	7.1	12.3	8.1	8.0	9.1
11	9.9	10.7	12.5	11.6	10.6	8.1	8.0	7.4	13.1	8.0	7.5	9.0
12	9.8	10.4	12.3	11.1	9.6	8.1	8.3	8.6	9.9	8.0	7.4	8.9
13	9.6	10.2	12.3	10.6	9.1	8.1	9.6	8.8	8.3	8.8	7.5	10.7
14	9.4	10.2	13.7	11.1	9.1	8.1	9.4	8.0	7.7	9.4	7.4	10.6
15	9.3	10.3	13.5	10.6	9.7	8.4	8.7	9.5	8.9	8.9	7.3	9.7
16	9.4	10.7	13.5	10.8	9.4	13.0	10.0	10.4	8.0	9.2	7.2	8.9
17	9.2	11.4	27.9	11.2	9.3	15.0	9.2	9.4	7.7	8.4	7.4	9.2
18	9.2	11.1	25.6	13.1	9.2	11.4	8.7	9.2	7.4	8.0	8.0	14.0
19	9.2	10.9	19.5	13.4	9.2	10.4	7.6	8.3	7.4	7.3	8.7	11.5
20	9.2	10.6	16.0	12.7	9.2	9.4	7.1	8.9	8.0	7.5	8.8	10.2
21	9.5	11.8	13.8	12.1	9.2	9.3	6.9	8.1	9.2	7.9	8.0	9.4
22	10.2	14.5	13.1	11.1	9.4	8.9	6.9	7.8	8.4	7.4	7.9	12.2
23	10.2	13.7	12.5	10.7	9.5	8.6	6.9	7.4	8.1	7.2	7.4	14.6
24	9.7	12.6	12.4	10.5	9.2	8.5	7.0	7.4	7.8	7.2	7.5	12.2
25	9.5	16.7	11.9	10.2	8.9	8.4	7.5	7.3	7.9	7.2	7.7	10.4
26	9.3	18.1	12.0	10.2	8.8	8.3	7.6	7.4	13.6	7.0	10.1	9.9
27	9.3	16.2	11.6	10.0	8.6	7.9	7.6	7.4	13.8	7.4	12.4	9.4
28	9.2	25.5	11.9	10.1	8.5	7.8	7.0	7.4	12.8	8.9	10.8	8.9
29	9.9	.....	19.6	9.8	8.4	7.5	7.0	8.7	10.9	8.9	9.1	8.6
30	11.6	.....	28.2	9.9	8.3	7.6	7.8	8.4	9.3	8.2	8.4	8.9
31	11.4	.....	24.6	.....	8.2	.....	8.0	7.5	.....	7.8	.....	9.7
1903 *a*												
1	9.7	10.2	26.7	23.4	10.6	11.0	9.7	9.0	7.4	7.1	6.8	7.0
2	9.4	9.6	24.0	18.7	10.5	16.3	9.4	8.9	7.2	7.0	7.2	7.2
3	11.2	9.7	18.4	16.1	10.5	20.0	9.0	12.0	7.3	7.0	8.3	7.2
4	13.8	10.8	14.9	15.2	10.6	15.3	9.5	13.6	7.3	6.9	9.1	7.1
5	13.9	13.5	13.9	14.6	12.4	13.2	9.6	11.7	7.4	7.1	9.1	7.0
6	12.2	13.2	13.7	13.9	11.3	19.9	10.6	10.6	7.2	6.9	9.4	7.0
7	10.7	14.6	13.7	13.0	10.7	24.7	10.0	9.5	7.1	7.1	8.8	7.1
8	9.9	30.7	13.3	13.3	10.5	25.5	10.1	8.6	7.2	7.1	8.0	7.2
9	9.5	33.0	15.0	16.8	10.5	17.7	9.5	8.1	7.3	7.2	7.8	7.3
10	9.2	28.7	15.1	17.5	10.4	15.6	9.2	8.1	7.2	7.5	7.6	7.4
11	9.2	24.1	14.9	14.9	10.4	16.1	9.2	8.1	8.3	7.4	7.6	7.4
12	11.7	28.4	18.2	13.3	10.0	16.1	9.9	10.0	7.8	7.3	7.5	7.4
13	14.1	26.5	19.0	13.1	10.0	15.0	10.0	9.1	7.2	7.0	7.5	7.1
14	12.2	20.4	15.3	20.4	10.4	12.1	13.2	8.3	7.4	7.0	7.5	7.2
15	10.6	16.0	13.8	23.6	11.2	11.1	13.4	9.5	8.2	6.9	7.3	7.4
16	9.9	14.4	13.2	17.8	12.9	10.6	11.0	9.8	9.4	6.9	7.3	7.6
17	9.6	25.9	12.7	14.6	11.7	10.1	9.5	10.3	11.9	7.3	7.3	7.5
18	9.3	29.1	12.2	13.6	10.5	9.8	8.9	9.9	10.8	9.2	7.5	7.3
19	9.2	23.4	11.9	12.7	9.9	9.7	8.7	17.7	9.0	8.4	7.6	7.2
20	9.1	18.6	11.8	12.5	9.6	9.6	8.4	14.8	8.1	8.2	7.8	7.0
21	9.1	14.6	12.0	12.3	9.5	9.8	8.2	11.3	8.2	7.6	7.7	7.1
22	9.2	13.1	13.2	12.3	9.4	10.4	8.2	9.9	7.6	7.4	7.3	7.4
23	9.0	12.6	25.5	11.9	9.5	9.8	8.1	8.7	7.5	7.0	7.3	7.9
24	9.0	12.1	29.4	11.5	9.2	9.4	8.1	8.4	7.4	7.1	7.3	7.6
25	9.1	11.7	28.6	11.1	9.2	9.4	8.0	8.3	7.4	6.8	7.4	7.4
26	9.9	11.5	22.5	11.4	9.0	9.3	7.6	8.0	7.4	7.0	7.3	7.7
27	10.2	11.6	17.1	11.7	8.7	9.7	7.9	7.8	7.2	7.0	7.3	8.0
28	10.9	16.9	15.2	11.5	8.8	10.7	8.0	7.6	7.2	6.9	7.1	8.0
29	10.9	.....	14.8	11.0	9.4	12.9	7.7	7.6	7.1	6.9	7.0	7.6
30	11.8	.....	25.3	10.7	9.6	11.0	8.0	7.5	7.1	7.0	7.1	7.5
31	11.2	.....	27.3	.....	9.7	.....	8.7	7.5	.....	7.0	.....	7.5

a Mean of four daily readings.

Daily gage height, in feet, of Savannah River at Augusta.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904 *a*												
1	7.3	8.0	8.8	8.6	7.4	9.2	6.8	7.7	7.3	5.3	5.1	5.7
2	7.2	7.9	8.6	8.4	7.5	11.2	7.5	7.1	7.0	4.8	4.8	6.0
3	7.1	7.9	8.6	8.3	7.3	9.1	6.8	8.9	7.0	5.3	5.4	6.3
4	7.2	7.7	8.7	8.2	7.3	7.9	5.8	8.6	6.2	5.2	5.4	6.9
5	7.3	7.6	8.4	8.1	7.6	7.0	6.4	10.4	9.3	4.9	5.6	7.3
6	7.2	7.7	8.1	8.0	7.5	6.9	6.0	8.6	11.1	5.0	6.3	8.4
7	7.1	7.4	10.4	7.9	7.3	7.0	5.5	8.4	10.4	5.3	6.7	11.5
8	6.8	9.0	16.3	8.2	7.0	7.5	5.6	16.3	8.1	4.7	6.5	9.8
9	7.0	11.9	16.2	9.1	8.8	8.0	5.1	24.5	7.3	3.8	6.4	8.1
10	7.0	11.2	12.6	10.1	8.9	7.1	6.2	24.5	7.0	5.5	6.0	7.7
11	7.3	14.4	10.5	9.3	8.9	6.0	7.0	19.1	6.5	5.2	5.6	7.2
12	7.4	12.7	9.7	8.7	8.0	6.0	6.9	14.3	6.7	4.1	5.5	7.2
13	7.6	10.7	9.3	8.4	7.6	6.7	6.7	11.8	6.4	5.2	5.4	7.0
14	7.4	9.2	9.1	8.2	7.5	6.6	6.3	9.6	6.3	4.6	6.6	7.1
15	7.5	8.7	9.1	8.0	7.0	6.5	5.7	9.3	6.1	4.5	6.8	7.0
16	7.5	8.6	9.4	8.0	7.1	6.4	5.4	10.3	6.1	3.8	7.0	7.0
17	7.2	8.4	9.0	7.8	7.2	6.2	4.8	10.7	5.8	5.5	6.7	6.9
18	7.5	8.2	8.4	8.0	7.0	6.0	5.6	9.1	5.5	4.3	6.3	7.4
19	7.7	8.1	8.4	8.0	7.0	5.2	5.4	8.3	5.7	4.5	5.9	7.6
20	7.6	8.9	8.2	7.9	6.8	6.5	5.5	7.6	5.5	4.3	5.4	7.1
21	7.4	11.6	8.3	7.8	6.8	6.6	5.3	10.1	5.5	5.1	6.3	7.1
22	7.6	14.6	8.5	7.7	6.5	7.1	5.2	9.0	5.6	4.2	5.8	6.8
23	13.1	18.5	9.6	7.7	6.7	7.2	5.0	7.4	5.7	3.8	5.4	6.8
24	13.4	15.7	11.1	7.5	6.6	6.7	10.1	7.1	5.6	5.5	5.9	6.3
25	11.5	12.5	13.4	7.5	6.4	6.1	7.7	6.9	5.5	4.8	6.2	6.1
26	9.4	10.6	11.9	7.6	6.4	5.4	8.7	6.8	5.7	4.8	5.9	6.4
27	8.5	9.5	10.5	7.6	6.4	6.2	7.8	9.2	5.4	4.2	5.6	6.8
28	8.2	9.1	10.4	7.9	6.4	5.7	7.6	12.5	5.5	5.4	6.2	7.8
29	8.2	9.0	9.6	7.8	5.6	5.7	9.5	12.4	5.6	5.3	5.7	9.7
30	8.0	.....	9.1	7.6	5.6	6.6	8.5	9.9	5.3	3.8	5.4	9.9
31	7.9	.....	8.8	.....	6.8	.....	6.8	8.0	.....	5.6	.....	8.3
1905 *a*												
1	7.5	7.2	9.6	7.6	6.6	8.1	11.3	6.8	7.1	5.0	6.2	6.3
2	7.6	7.1	9.4	7.6	8.6	7.9	22.6	6.9	7.0	5.8	6.1	6.1
3	7.5	7.2	9.1	7.5	8.3	7.7	20.2	7.0	9.2	5.3	6.1	8.1
4	7.3	7.0	8.8	7.5	10.9	7.1	12.3	6.9	9.5	5.6	5.9	20.6
5	7.2	7.2	8.6	7.5	12.3	7.2	9.6	6.7	8.2	6.4	6.0	20.3
6	7.2	7.1	9.0	7.8	11.0	7.2	9.5	6.4	7.6	7.5	6.3	12.6
7	7.5	7.3	8.1	8.1	11.5	7.0	13.1	6.7	7.1	6.6	6.1	9.3
8	8.6	9.0	8.2	8.2	18.1	7.1	12.1	7.3	6.9	5.4	5.6	8.4
9	8.8	13.4	8.5	7.4	15.0	6.8	10.4	9.1	6.8	6.0	6.2	9.4
10	8.0	16.9	8.5	7.7	12.1	6.6	9.3	11.1	6.5	5.8	6.1	19.0
11	7.7	17.2	8.7	8.3	10.0	6.2	8.1	9.3	6.8	6.3	6.4	18.2
12	7.7	16.4	10.6	7.9	9.0	6.7	11.5	12.6	6.6	6.6	7.6	14.0
13	12.0	23.5	12.3	8.5	8.3	6.4	18.4	13.8	6.3	9.8	7.2	10.6
14	17.9	25.3	9.8	8.8	7.9	6.6	20.7	13.3	6.6	7.9	6.5	9.4
15	14.2	20.9	9.9	8.4	7.9	7.4	16.5	10.6	7.0	6.7	6.3	9.9
16	10.8	16.3	9.3	8.2	7.8	7.6	13.1	9.5	6.7	6.8	6.4	11.2
17	9.2	12.5	8.9	8.2	7.9	7.4	11.1	9.6	5.9	6.5	6.3	10.4
18	8.7	10.8	8.6	7.3	9.4	7.7	9.3	9.4	6.5	6.5	6.2	9.6
19	8.4	10.2	8.5	7.4	8.2	7.8	9.5	8.8	6.3	6.4	5.6	9.1
20	8.2	10.1	8.4	7.4	7.6	7.5	9.3	8.5	5.6	6.5	6.2	10.2
21	8.3	18.0	8.4	7.4	7.4	7.1	9.1	8.5	6.2	6.0	6.1	27.6
22	8.2	23.5	8.7	7.1	7.8	7.1	8.4	7.8	6.1	5.8	6.5	27.5
23	8.2	20.2	9.0	6.9	8.4	7.8	7.6	7.9	6.1	6.5	7.0	21.5
24	8.0	15.6	8.6	6.9	14.6	7.8	7.9	8.7	5.4	5.8	6.4	16.2
25	7.7	12.4	8.2	6.9	14.2	6.9	7.6	9.2	5.8	6.1	6.4	12.4
26	7.5	11.4	8.4	7.0	11.4	6.9	7.6	10.9	5.7	5.9	5.4	10.8
27	7.2	10.7	8.4	7.0	9.7	6.8	7.5	10.5	5.9	5.9	6.5	9.8
28	7.0	9.7	7.6	7.3	9.5	6.6	7.3	9.0	5.7	6.1	6.3	9.7
29	6.8	.....	7.6	7.7	9.6	6.8	7.6	8.1	5.6	6.5	6.4	14.3
30	7.2	.....	7.8	9.2	9.4	6.5	7.7	7.7	5.2	6.4	6.3	14.0
31	7.2	.....	7.5	.....	8.7	.....	7.9	7.2	.....	6.1	.....	12.9

a Mean of four daily readings.

Daily gage height, in feet, of Savannah River at Augusta.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
1	11.2	12.4	8.9	15.6	9.4	8.2	7.8	19.5	17.8	18.4	9.5	9.0
2	10.4	11.9	8.8	13.6	9.4	7.8	12.7	18.4	14.6	18.1	9.4	8.8
3	9.9	11.2	8.7	11.9	8.9	7.6	10.7	16.4	12.1	18.6	9.4	8.9
4	26.1	10.8	8.8	11.2	9.0	9.5	11.0	13.8	10.7	23.2	9.0	8.8
5	29.3	10.8	10.9	11.0	9.7	12.1	13.7	12.6	10.5	22.5	9.1	8.7
6	23.9	9.9	10.1	10.5	9.4	10.5	11.5	11.6	12.3	19.2	9.1	8.7
7	17.6	10.5	9.5	10.3	10.9	9.5	10.5	11.8	11.7	17.8	9.1	9.0
8	13.1	10.4	9.9	10.0	12.8	8.6	9.7	10.6	10.7	16.1	9.0	9.2
9	11.6	12.3	16.4	10.0	11.4	8.1	14.6	9.9	9.8	13.8	9.0	9.0
10	11.1	12.1	15.2	10.7	9.6	8.0	17.7	9.3	9.8	12.7	9.0	8.8
11	10.6	11.0	11.6	11.1	9.0	8.0	13.7	8.9	9.3	12.0	8.8	9.0
12	12.6	11.0	10.9	10.6	8.8	9.3	11.5	8.8	9.4	11.7	9.1	13.4
13	15.8	11.2	9.8	10.0	8.6	15.4	9.7	9.2	16.9	11.0	9.0	11.8
14	14.0	11.1	9.7	9.8	8.5	21.0	9.9	10.8	14.5	10.6	9.0	10.5
15	11.8	10.6	11.0	10.7	8.4	19.4	9.1	11.6	12.5	10.6	9.1	9.8
16	11.0	10.2	24.3	12.0	8.2	23.7	17.8	11.2	10.6	10.6	9.2	9.2
17	10.8	9.6	22.8	11.5	8.0	24.3	19.5	11.4	9.4	10.5	9.3	9.2
18	10.8	9.5	18.8	10.5	8.0	20.4	18.0	10.6	11.6	10.5	9.2	9.5
19	10.1	9.4	13.4	9.8	8.0	16.0	20.9	11.0	17.9	11.2	10.0	11.1
20	9.9	9.3	26.9	9.6	7.8	12.6	17.9	13.8	21.9	13.5	14.5	12.5
21	9.7	9.2	27.2	9.5	7.8	10.5	16.5	15.2	22.4	11.7	12.7	13.5
22	10.0	10.8	21.5	9.4	7.8	9.4	14.0	14.5	17.5	11.0	11.0	12.1
23	20.0	10.9	15.6	9.5	7.7	9.1	13.9	12.7	14.1	10.5	10.2	10.5
24	28.8	10.1	13.1	8.9	7.8	8.5	12.9	12.3	13.4	10.0	9.9	10.0
25	25.1	9.4	11.8	8.8	8.2	8.6	13.3	10.9	15.9	9.9	9.5	9.5
26	21.6	9.3	11.4	8.8	8.0	9.0	14.2	10.5	14.2	9.9	9.5	9.5
27	24.2	9.2	11.1	8.8	10.5	8.6	12.4	11.3	14.0	9.6	9.3	9.3
28	22.3	9.0	13.2	9.1	13.3	8.7	10.6	12.2	12.7	9.5	9.2	9.3
29	18.8	.....	14.4	10.6	11.2	8.0	11.1	14.8	12.7	9.5	9.2	9.6
30	15.6	.....	13.7	10.2	9.2	7.9	11.9	14.8	15.0	9.4	9.1	10.0
31	13.6	.....	15.2	.....	8.6	.....	19.8	16.6	.....	9.4	.....	10.2

NOTE.—These gage heights are the mean of four readings per day.

Rating tables for Savannah River at Augusta.

JANUARY 1, 1899, TO DECEMBER 31, 1901.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
3.30	1,930	6.20	4,240	9.10	8,570	14.00	17,900
3.40	1,990	6.30	4,360	9.20	8,740	14.20	18,340
3.50	2,050	6.40	4,490	9.30	8,910	14.40	18,780
3.60	2,110	6.50	4,620	9.40	9,080	14.60	19,220
3.70	2,170	6.60	4,750	9.50	9,250	14.80	19,660
3.80	2,230	6.70	4,880	9.60	9,420	15.00	20,100
3.90	2,290	6.80	5,010	9.70	9,590	15.50	21,250
4.00	2,350	6.90	5,140	9.80	9,760	16.00	22,400
4.10	2,410	7.00	5,300	9.90	9,930	16.50	23,600
4.20	2,470	7.10	5,450	10.00	10,100	17.00	24,800
4.30	2,530	7.20	5,600	10.20	10,460	17.50	26,050
4.40	2,595	7.30	5,750	10.40	10,820	18.00	27,300
4.50	2,660	7.40	5,900	10.60	11,180	18.50	28,700
4.60	2,725	7.50	6,050	10.80	11,540	19.00	30,100
4.70	2,790	7.60	6,200	11.00	11,900	19.50	31,700
4.80	2,860	7.70	6,350	11.20	12,260	20.00	33,300
4.90	2,930	7.80	6,500	11.40	12,620	21.00	36,900
5.00	3,000	7.90	6,650	11.60	13,340	22.00	41,000
5.10	3,060	8.00	6,800	11.80	13,420	23.00	45,800
5.20	3,120	8.10	6,960	12.00	13,900	24.00	52,000
5.30	3,250	8.20	7,120	12.20	14,380	25.00	60,000
5.40	3,340	8.30	7,280	12.40	14,860	26.00	68,800
5.50	3,440	8.40	7,440	12.60	15,000	27.00	77,600
5.60	3,540	8.50	7,600	12.80	15,400	28.00	86,400
5.70	3,650	8.60	7,760	13.00	15,800	29.00	95,200
5.80	3,760	8.70	7,920	13.20	16,220	30.00	104,000
5.90	3,870	8.80	8,080	13.40	16,640	31.00	112,800
6.00	4,000	8.90	8,240	13.60	17,060	32.00	121,600
6.10	4,120	9.00	8,400	13.80	17,480		

JANUARY 1, 1902, TO DECEMBER 31, 1903.[a]

6.80	3,400	8.40	6,400	10.00	9,600	11.60	12,860
7.00	3,740	8.60	6,800	10.20	10,000	11.80	13,280
7.20	4,100	8.80	7,200	10.40	10,400	12.00	13,700
7.40	4,460	9.00	7,600	10.60	10,800	12.20	14,120
7.60	4,840	9.20	8,000	10.80	11,200	12.40	14,540
7.80	5,220	9.40	8,400	11.00	11,600	12.60	14,960
8.00	5,600	9.60	8,800	11.20	12,020	12.80	15,380
8.20	6,000	9.80	9,200	11.40	12,440	13.00	15,800

JANUARY 1 TO DECEMBER 31, 1904.

3.80	1,450	5.20	2,360	10.50	9,150	17.00	23,700
3.90	1,500	5.40	2,520	11.00	10,050	17.50	25,120
4.00	1,550	5.60	2,690	11.50	10,980	18.00	26,600
4.10	1,610	5.80	2,870	12.00	11,950	18.50	28,170
4.20	1,670	6.00	3,050	12.50	12,950	19.00	29,800
4.30	1,730	6.50	3,550	13.00	14,000	19.50	31,470
4.40	1,790	7.00	4,100	13.50	15,080	20.00	33,200
4.50	1,850	7.50	4,680	14.00	16,200	21.00	36,900
4.60	1,920	8.00	5,300	14.50	17,350	22.00	41,000
4.70	1,990	8.50	5,980	15.00	18,550	23.00	45,800
4.80	2,060	9.00	6,700	15.50	19,780	24.00	52,000
4.90	2,130	9.50	7,480	16.00	21,050	25.00	60,000
5.00	2,200	10.00	8,300	16.50	22,350		

JANUARY 1 TO DECEMBER 31, 1905.[b]

5.00	2,650	5.90	3,400	6.80	4,300	7.70	5,340
5.10	2,725	6.00	3,495	6.90	4,410	7.80	5,470
5.20	2,800	6.10	3,590	7.00	4,520	7.90	5,600
5.30	2,880	6.20	3,690	7.10	4,630	8.00	5,740
5.40	2,960	6.30	3,790	7.20	4,740	8.10	5,890
5.50	3,045	6.40	3,890	7.30	4,860	8.20	6,050
5.60	3,130	6.50	3,990	7.40	4,980	8.30	6,220
5.70	3,220	6.60	4,090	7.50	5,100		
5.80	3,310	6.70	4,190	7.60	5,220		

a Above gage height 13.0 feet this table is the same as the table for 1899 to 1901.
b Above gage height 8.3 feet this table is the same as that for 1903.

Rating table for Savannah River at Augusta, Ga., for 1906.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
7.60	5,100	9.30	8,040	11.00	11,800	16.00	25,900
7.70	5,250	9.40	8,250	11.20	12,260	17.00	29,400
7.80	5,400	9.50	8,460	11.40	12,740	18.00	33,200
7.90	5,560	9.60	8,670	11.60	13,220	19.00	37,300
8.00	5,720	9.70	8,890	11.80	13,700	20.00	41,700
8.10	5,880	9.80	9,110	12.00	14,200	21.00	46,400
8.20	6,040	9.90	9,330	12.20	14,700	22.00	51,500
8.30	6,210	10.00	9,550	12.40	15,220	23.00	57,000
8.40	6,380	10.10	9,770	12.60	15,740	24.00	62,900
8.50	6,550	10.20	9,990	12.80	16,260	25.00	69,000
8.60	6,720	10.30	10,210	13.00	16,800	26.00	75,500
8.70	6,900	10.40	10,430	13.20	17,340	27.00	82,300
8.80	7,080	10.50	10,650	13.40	17,900	28.00	89,500
8.90	7,260	10.60	10,880	13.60	18,460	29.00	97,000
9.00	7,450	10.70	11,110	13.80	19,020	30.00	105,000
9.10	7,640	10.80	11,340	14.00	19,600		
9.20	7,840	10.90	11,570	15.00	22,650		

NOTE.—The above table is based on discharge measurements made during 1904-1906 and earlier high-water measurements, and is well defined.

Estimated monthly discharge of Savannah River at Augusta.

[Drainage area, 7,294 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1899 a					
January	45,220	7,600	16,084	2.20	2.54
February	112,800	12,850	24,891	4.78	4.98
March	98,440	11,900	24,804	3.41	3.93
April	31,700	9,420	14,286	1.97	2.20
May	10,820	5,750	7,649	1.05	1.21
June	9,560	4,320	6,080	0.83	0.92
July	13,220	3,220	5,148	0.71	0.82
August	16,430	2,350	5,126	0.70	0.81
September	17,690	3,160	5,554	0.76	0.85
October	18,120	3,000	5,611	0.77	0.89
November	12,470	3,340	4,807	0.66	0.73
December	19,000	3,000	7,043	0.97	1.12
The year	112,800	2,350	11,428	1.57	21.00
1900					
January	20,100	4,430	7,267	1.00	1.15
February	124,240	4,555	26,251	3.60	3.74
March	46,420	10,290	18,322	2.51	2.90
April	78,400	8,000	9,695	1.33	1.48
May	15,800	6,500	9,264	1.27	1.46
June	96,960	6,050	22,702	3.11	3.47
July	18,890	5,900	9,590	1.31	1.51
August	12,470	4,620	5,776	0.79	0.91
September	19,000	3,880	6,199	0.85	0.95
October	24,080	3,940	6,681	0.92	1.06
November	19,880	4,620	7,431	1.02	1.14
December	20,790	5,975	9,704	1.33	1.53
The year	124,240	3,880	11,574	1.59	21.30
1901					
January	48,590	7,680	14,295	1.96	2.26
February	75,060	7,440	16,566	2.27	2.36
March	86,400	6,500	15,133	2.07	2.39
April	111,920	10,460	25,365	3.48	3.88
May	77,600	7,280	15,344	2.10	2.42
June	76,720	8,400	19,574	2.68	2.99
July	16,430	6,350	8,981	1.23	1.42
August	92,560	5,600	26,256	3.60	4.15
September	111,920	8,740	20,568	2.82	3.15
October	14,200	7,120	9,172	1.26	1.45
November	7,920	7,120	7,547	1.03	1.15
December	107,520	7,120	18,565	2.54	2.93
The year	111,920	5,600	16,447	2.25	30.55
1902					
January	51,520	8,000	11,629	1.60	1.84
February	125,120	10,000	27,595	3.78	3.94
March	137,440	12,880	36,035	4.94	5.69
April	28,960	8,200	13,468	1.85	2.06
May	11,200	6,400	8,394	1.15	1.33
June	20,160	4,650	7,469	1.03	1.15
July	9,680	3,400	5,369	.69	.80
August	10,400	3,920	5,943	.80	.92
September	17,480	3,920	7,455	1.02	1.14
October	11,400	3,760	6,623	.88	1.01
November	14,540	3,920	5,851	.80	.89
December	37,520	6,800	12,700	1.74	2.01
The year	137,440	3,400	12,333	1.69	22.78

a Low-water daily estimates of flow are liable to considerable error from January to August and for December, 1899. See description, p. 39.

Estimated monthly discharge of Savannah River at Augusta—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1903					
January	18,120	7,600	10,591	1.45	1.67
February	130,400	8,800	39,580	5.42	5.64
March	98,720	13,280	32,924	4.51	5.20
April	49,520	11,000	19,907	2.73	3.05
May	15,590	7,000	10,040	1.38	1.59
June	64,400	8,200	15,265	2.50	2.79
July	16,640	4,840	8,153	1.12	1.29
August	26,550	4,650	9,054	1.24	1.43
September	13,490	3,920	5,315	.73	.81
October	3,000	3,400	4,179	.57	.66
November	8,400	3,400	4,979	.68	.76
December	5,600	3,740	4,405	.60	.69
The year	130,400	3,400	13,949	1.91	25.58
1904					
January	14,860	3,880	5,583	.765	.882
February	28,170	4,560	9,206	1.26	1.46
March	21,890	5,420	8,579	1.18	1.36
April	8,470	4,680	5,512	.756	.844
May	6,550	2,680	4,392	.588	.678
June	10,410	2,360	4,068	.560	.625
July	8,470	2,060	3,769	.517	.596
August	55,750	3,880	11,710	1.61	1.86
September	10,230	2,440	3,796	.520	.580
October	2,680	a 1,450	2,079	.285	.329
November	4,100	2,060	3,015	.413	.461
December	10,980	2,760	4,772	.654	.754
The year	55,750	1,450	5,583	.759	10.33
1905					
January	25,800	4,300	7,075	.970	1.12
February	62,640	4,520	18,780	2.57	2.68
March	14,330	5,100	7,275	.997	1.15
April	8,000	4,410	5,416	.743	.829
May	27,580	4,090	9,764	1.34	1.54
June	5,899	3,690	4,704	.645	.720
July	43,880	4,860	12,620	1.73	1.99
August	17,480	3,890	7,745	1.06	1.22
September	8,600	2,800	4,218	.578	.645
October	9,200	2,650	3,916	.537	.619
November	5,220	2,960	3,789	.519	.579
December	82,880	3,590	19,270	2.64	3.04
The year	82,880	2,650	8,714	1.19	16.13

a The low days in October, 1904, occurred on Sundays, when the mills were not running, and water was being held back by the dam.

Month	Discharge in second feet			Run-off	
	Maximum	Minimum	Mean	Sec. ft. per sq. mile	Depth in inches
January	99,400	8,890	30,900	4.23	4.88
February	15,200	7,450	10,600	1.45	1.51
March	83,700	6,900	23,300	3.19	3.68
April	24,600	7,080	10,800	1.48	1.65
May	17,600	5,250	8,020	1.10	1.27
June	64,700	5,100	16,100	2.21	2.47
July	45,900	5,400	19,500	2.67	3.08
August	39,500	7,080	16,200	2.22	2.56
September	53,700	8,040	19,600	2.68	2.99
October	58,200	8,250	18,700	2.56	2.95
November	21,100	7,080	8,820	1.21	1.35
December	18,200	6,900	9,580	1.31	1.51
The year	99,400	5,100	16,000	2.19	29.90

NOTE.—Values for 1906 are good; the records at Woodlawn are better than at Augusta.

BROAD RIVER (OF GEORGIA) NEAR CARLTON

This station was established May 27, 1897, by M. R. Hall. The gage is now maintained and the observer paid by the United States Weather Bureau. The station is located at the Seaboard Air Line bridge 3 miles east of Carlton and 2 miles above the mouth of the South Fork.

The channel above and below the station is straight for 500 feet. The right bank is high and is not liable to overflow. The left bank is low for about 400 feet, beyond which it is high and rocky. It overflows at a gage height of about 16 feet. The bed of the stream is sand and gravel and is somewhat changeable.

Discharge measurements are made from the upstream side of the deck bridge, which has two spans of 125 feet each, with trestle approaches 340 feet long on the left bank and 50 feet long on the right bank. The initial point for soundings is the end of the iron bridge on the right bank, upstream side.

A standard chain gage is fastened to the guard rail, with its bottom resting on the upstream end of the cross-ties. The center of the pulley is 39.5 feet from the initial point for soundings. The length of the chain is 54.00 feet. The gage is read once each day by S. P. Powers, jr. During the low water of October 1 to December 31, 1905, the gage was read twice each day. Bench marks were established as follows: (1) The top of the upstream iron girder under the cross-ties at a point about 40 feet from the initial point for soundings; elevation, 51 feet. (2) The top of the capstone of the right bank pier at a point under the upstream side of the end of the bridge; elevation, 30.78 feet above the datum of the gage, which is 384 feet above sea level.

Discharge measurements of Broad River (of Georgia) near Carlton.

Date	Gage height	Discharge	Date	Gage height	Discharge
1897	*Feet*	*Sec.-ft.*	1901	*Feet*	*Sec.-ft.*
May 27	2.10	595	January 1	3.55	1,497
June 22	1.92	580	January 22	2.85	991
July 28	2.24	920	April 23	3.50	1,807
August 17	2.25	865	August 14	5.25	3,173
September 27	1.60	353			
October 29	1.67	407	1902		
November 10	1.70	396	July 18	2.40	638
December 10	2.00	615	September 30	2.83	960
1898			1903		
January 29	2.68	995	March 21	4.55	2,592
February 21	2.00	577	May 8	3.10	1,242
April 20	2.10	667	June 11	3.65	1,766
June 14	1.56	366	August 14	2.70	953
July 25	3.75	2,165	September 16	4.52	2,435
September 13	2.50	930	October 29	2.16	606
Do	2.50	960	December 8	2.20	628
October 8	3.05	1,446			
			1904		
1899			March 17	2.62	809
February 28	9.05	8,281	May 5	2.20	581
March 1	5.28	3,205	July 21	1.48	299
April 25	3.65	1,841	September 6	2.37	737
May 15	2.60	919	November 15	1.83	460
June 28	2.80	1,063			
September 27	2.00	514	1905		
November 11	2.06	485	January 18	2.50	745
December 21	2.25	591	Do	2.50	762
			March 18	2.25	642
1900					
February 16	4.25	2,088	1906		
March 30	3.30	1,480	March 31	4.71	2,560
May 3	4.49	2,562	July 18	5.95	3,990
October 17	2.22	661	October 19	4.10	1,970

Daily gage height, in feet, of Broad River (of Georgia) near Carlton.

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897							1897						
1	1.85	1.85	1.7	1.5	1.65	2.2	17	1.85	3.3	1.5	1.6	1.7	2.0
2	1.85	1.85	2.0	1.5	2.4	2.1	18	3.6	2.0	1.5	1.8	1.7	2.0
3	1.8	1.8	2.3	1.5	2.25	2.2	19	4.9	1.9	1.5	2.0	1.65	2.05
4	1.8	1.8	1.85	1.5	1.95	2.7	20	6.3	2.0	1.5	2.4	1.65	2.1
5	2.0	1.8	1.8	1.5	1.8	2.55	21	5.3	1.95	1.5	2.2	1.7	2.1
6	2.0	1.75	1.7	1.5	1.8	2.5	22	3.85	2.15	1.5	2.1	1.7	2.15
7	1.9	2.6	1.6	1.5	1.8	2.3	23	2.9	2.0	1.7	1.8	1.7	2.4
8	2.1	2.2	1.55	1.5	1.75	2.1	24	2.3	1.95	1.7	1.8	1.7	2.2
9	2.35	2.0	1.55	1.5	1.75	2.05	25	2.15	1.85	1.65	1.7	1.7	2.1
10	2.05	2.0	1.55	1.5	1.7	2.0	26	2.25	1.8	1.65	1.65	1.7	2.3
11	2.55	1.95	1.55	1.5	1.7	1.95	27	2.15	1.75	1.6	1.7	3.15	2.65
12	2.35	1.9	1.55	2.45	1.7	1.95	28	2.3	1.75	1.6	1.65	2.75	2.35
13	1.95	1.85	1.5	2.5	1.7	1.9	29	2.1	1.7	1.55	1.65	2.3	2.1
14	1.85	1.8	1.5	2.05	1.7	2.1	30	1.95	1.7	1.5	1.65	2.7	2.1
15	1.8	1.8	1.5	1.85	1.7	2.3	31	1.9	1.65		1.65		2.1
16	1.75	4.55	1.5	1.7	1.7	2.1							

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Daily gage height, in feet, of Broad River (of Georgia) near Carlton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1898												
1	2.05	2.25	1.9	3.6	2.2	1.6	1.4	2.1	9.1	2.15	2.35	2.75
2	2.0	2.15	1.9	2.75	2.15	1.6	1.35	1.95	18.85	2.1	2.35	2.55
3	1.95	2.1	1.95	2.45	2.05	1.6	1.35	1.8	18.53	3.2	2.3	2.8
4	1.95	2.05	2.1	2.3	2.05	1.6	1.4	3.0	13.38	4.85	2.3	3.9
5	1.95	2.0	2.15	5.25	2.0	1.55	1.8	3.85	7.88	11.2	2.8	3.5
6	1.95	2.05	2 05	4.45	2.0	1.5	2.85	4.0	5.0	10.1	3.2	3.1
7	1.95	2.05	2.0	3.0	2.0	1.45	3.5	4.2	4.6	4.35	2.4	2.85
8	1.95	2.0	1.95	2.6	1.95	1.45	2.6	3.4	4.5	3.25	2.35	2.7
9	1.95	2.0	1.9	2.45	1.95	1.4	2.3	2.5	3.5	2.9	2.35	2.6
10	1.9	2.0	1.9	2.4	1.9	1.35	1.95	2.2	2.9	2.7	2.65	2.55
11	1.9	2.0	1.85	2.45	1.9	1.3	1.7	3.05	2.85	2.6	2.45	2.55
12	1.9	2.0	1.85	2.35	1.9	1.45	1.6	6.2	2.7	2.5	2.4	2.5
13	1.9	1.95	1.85	2.25	1.85	2.0	4.9	4.05	2.55	2.45	2.45	2.5
14	1.9	1.95	2.35	2.3	1.85	1.6	3.2	3.5	2.45	2.4	2.95	2.45
15	1.9	1.95	2.8	2.3	1.85	1.5	1.85	3.0	2.4	2.3	2.9	2.4
16	1.9	1.9	2.4	2.25	1.8	1.5	3.55	2.7	2.35	2.25	2.75	2.4
17	1.85	1.9	2.45	2.15	1.8	1.5	2.55	2.35	2.35	2.25	3.0	2.45
18	1.85	1.95	2.35	2.1	1.8	2.4	2.0	3.25	2.25	2.7	3.0	2.45
19	1.85	2.05	2.25	2.05	1.85	2.35	1.8	6.95	2.25	3.35	3.55	2.45
20	2.15	2.0	2.1	2.1	2.1	2.15	1.8	3.6	2.2	2.65	3.4	2.7
21	2.55	2.0	2.05	2.05	1.85	1.8	1.7	3.0	2.2	3.6	2.9	3.0
22	2.35	1.95	2.0	2.0	1.8	1.6	1.65	2.85	2.25	4.45	2.7	3.65
23	2.2	1.95	1.95	2.0	1.8	1.55	9.0	2.55	2.4	3.65	2.7	4.05
24	2.9	1.9	1.95	2.95	1.95	1.55	6.0	2.25	3.45	3.0	2.6	4.85
25	4.9	1.9	1.95	2.75	2.1	1.5	4.2	2.1	2.55	2.65	2.55	3.65
26	5.1	1.85	1.9	2.3	1.8	1.5	3.1	2.45	2.35	2.55	2.5	3.1
27	3.3	1.9	1.9	2.6	1.75	2.3	2.6	2.6	2.25	2.45	2.45	2.8
28	3.05	1.95	1.85	3.3	1.65	1.55	6.4	3.0	2.2	2.4	2.4	2.7
29	2.7	.....	1.95	2.6	1 6	1.5	4.6	2.7	2.2	2.4	2.75	2.65
30	2.5	.....	3.35	2.35	1.6	1.45	2.7	2.5	2.15	2.45	3.0	2.6
31	2.35	.....	4.4	.....	1.6	.....	2.35	2.35	.....	2.4	.....	2.65
1899												
1	3.1	3.45	5.2	5.8	3.0	2.6	2.3	2.4	3.8	1.9	2.15	2.35
2	2.95	3.0	4.1	4.45	3.0	2.55	2.25	2.35	3.0	1.9	2.1	2.4
3	2.75	3.75	3.8	3.6	2.95	2.5	2.2	2.25	2.5	1.9	2.1	2.3
4	2.7	3.7	3.6	3.65	2.95	2.5	2.2	2.2	2.3	1.9	2.05	2.3
5	2.65	4.3	3.95	3.7	3.0	2.45	2.2	2.2	2.2	2.0	2.05	2.25
6	4.45	7.2	4.2	3.45	3.2	2.4	2.2	2.15	2.15	2.2	2.05	2.2
7	6.45	13.18	3.65	3.6	3.15	2.4	2.25	2.1	2.1	2.15	2.05	2.2
8	6.4	10.6	3.45	4.4	3.0	2.5	2.4	2.1	2.1	4.3	2.05	2.2
9	3.9	5.45	3.4	4.2	2.95	2.6	2.3	2.1	2.1	3.4	2.05	2 2
10	3.3	4.3	3.35	3.6	2.95	2.45	2.4	2.1	2.1	2.5	2.05	2.2
11	3.8	3.75	3.3	3.5	2.9	2.4	2.3	2.15	2.5	2.35	2.05	2.2
12	4.05	3.6	3.3	3.4	2.85	2.6	2.25	2.1	2.1	2.25	2.05	3.4
13	3.7	3.45	3.25	3.3	2.8	3.7	2.2	2.15	2.5	2.2	2.05	3.6
14	3.45	3.35	3.5	3.3	2.8	3.0	2.2	2.05	2.0	2.15	2.05	2.95
15	3.75	3.3	4.4	3.25	2.75	2.4	2.15	2.0	2.0	2.1	2.1	2.5
16	3.5	4.4	13.88	3.25	2.75	2.5	2.1	1.95	1.95	2.1	2.1	2.45
17	3.5	5.05	11.3	3.2	2.7	2.65	2.1	1.9	1.95	2.1	2.05	2.35
18	3.25	4.45	4.7	3.15	2.7	2.65	2.25	1.9	1.95	2.1	2.05	2.3
19	3.1	3.8	4.5	3.25	2.65	2.55	2.15	1.9	1.95	2.1	2.05	2.3
20	3.0	3.5	3.1	3.2	2.65	2.45	2.1	1.9	2.05	2.1	2.05	2.3
21	2.9	3.55	5.2	3.15	2.6	2.4	2.1	2.0	2.0	2.1	2.05	2.25
22	2.85	3.6	4.0	3.1	2.65	2.35	2.05	1.95	2.0	2.05	2.05	2 25
23	2.95	3.5	4.15	3.05	2.7	2.3	2.2	2.0	2.0	2.05	3.65	2.2
24	3.05	3.3	4.55	3.1	2.65	2.3	2.25	1.95	1.95	2.05	3.45	4.4
25	3.0	3.2	3.75	3.2	2.6	2.3	2.15	2.0	1.95	2.05	2.45	4.3
26	2.95	3.15	3.6	3.5	2.6	3.7	2.45	2.05	1.95	2.05	3.6	3.0
27	2.85	15.78	3.5	3.2	2.6	3.0	6.5	3.95	2.0	2.05	3.7	2.6
28	2.8	11.15	3.45	3.15	2.55	2.8	5.3	2.45	1.95	2.05	2.9	2.6
29	2.8	.....	4.2	3.1	2.55	2.8	3.5	2.1	1.95	2.05	2.55	2.6
30	2.75	.....	3.7	3.1	2.5	2.5	2.8	3.5	1.9	2.1	2.4	2.5
31	3.1	.....	5.0	.....	2.7	.....	2.5	4.1	.....	2.15	.....	2.45
1900												2.4
1	2.4	2.3	5.5	3.1	3.4	2.6	3.5	3.7	2.3	2.1	2.4	2.4
2	2.4	2.3	4.9	3.1	3.2	2.5	3.3	3.8	2.5	2.1	2.4	2.4
3	2.4	2.3	3.85	3.0	4.7	2.3	3.4	3.6	2.5	2.1	6.5	4.2
4	2.35	2.3	3.3	3.1	3.9	2.9	3.2	3.6	2.3	2.2	3.5	5.0
5	2.35	3.3	3.15	3.0	3.2	2.9	3.0	2.5	2.2	2.3	2.8	

Daily gage height, in feet, of Broad River (of Georgia) near Carlton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900												
6	2.3	2.95	3.0	3.0	3.1	3.0	2.9	2.5	2.2	2.5	2.6	3.8
7	2.3	2.7	3.0	2.9	3.0	4.3	2.8	2.5	2.1	3.0	2.5	3.2
8	2.3	2.65	6.5	2.8	3.0	7.7	2.8	2.4	2.1	2.6	2.4	2.8
9	2.3	2.8	6.8	2.8	2.9	7.6	2.8	2.4	2.1	2.5	2.4	2.7
10	2.4	4.0	5.1	2.7	2.9	3.8	2.7	2.3	2.1	2.4	2.4	2.6
11	2.9	6.0	3.8	3.5	2.9	3.2	2.6	2.3	2.1	2.3	2.4	2.6
12	5.85	10.5	3.3	3.9	2.8	3.1	2.9	2.3	2.0	2.8	2.4	2.5
13	4.9	22.2	3.2	3.9	2.8	3.1	3.05	4 0	2.0	2.7	2.3	2.5
14	3.3	16.9	3.1	3.3	2.8	3.8	3.55	2.5	2.1	2.6	2.3	2.8
15	2.95	8.0	3.0	3.1	2.7	3.1	3.0	2,4	5.5	2.4	2.3	2.6
16	2.75	4.3	4.2	3.0	2.7	3.5	2.9	2.4	5.0	2.3	2.3	2.5
17	2.65	3.7	3.8	2.9	2.7	4.3	2.8	2.5	4.0	2.2	2.3	2.4
18	3.15	3.3	3.3	3.9	2.7	5.6	2.7	2.5	2.8	2.2	2.3	2.4
19	3.6	3.2	3.1	7.5	3.0	4.9	2.6	2.6	2.5	2.2	2.4	2.4
20	3.75	3.1	4.6	6.7	2.9	3.5	2.6	2 4	2.4	2.2	2.4	2.8
21	3.7	3.1	4.1	8.0	2.7	3.1	2.5	2.3	2.3	2.2	2.4	3.8
22	2.85	3.8	3.7	12.2	2.7	3.0	2.5	2 2	2.3	2.1	2 5	3.3
23	2.7	3.65	3.4	5.8	2.7	4.2	2.5	2.3	2.3	4.2	2.4	3.0
24	2.6	3.2	3.6	6.5	4.0	13.0	3.0	2.2	2.3	5.0	2.4	2.9
25	2.5	3.65	4.7	7.3	3.2	12.6	2.7	2.2	2.2	3.1	3.6	2.8
26	2.45	3.6	6.5	5.1	2.9	7.0	2.9	2.6	2.2	4.0	3.6	2.6
27	2.45	3.2	5.3	3.9	2.8	5.6	3.4	2.5	2.2	3.8	2.8	2.5
28	2.4	3.0	4.0	3.7	2.7	4.6	3.7	2.2	2.2	3.1	2.6	2.5
29	2.4	.....	3.5	3.5	2.7	4.0	3.4	2.2	2.2	2.7	2.5	2.5
30	2.35	.....	3.3	3.5	2.6	4.5	3.3	2.9	2.1	2.5	2.5	2.5
31	2.3	.....	3.25	.....	2.6	.....	3.9	2.2	.....	2.5	.....	3.3
1901												
1	3.6	3.2	2.6	3.6	2.7	4.3	3.9	2.4	5.0	2.9	2.5	2.5
2	3.2	2.9	2.6	6.9	2.6	3.9	3.1	2.3	3.9	2.9	2.5	2.5
3	3.6	3.3	2.6	11.95	2.6	3.3	3.0	2.3	3.5	4.8	2.5	3.0
4	3.5	7.9	2.6	9.3	2.6	3.0	2.9	2.3	3.1	2.9	2.5	3.4
5	3.3	6.3	2.6	4.5	2.5	2.9	2.8	2.3	3.0	2.8	2.6	3.4
6	2.8	4.1	2.6	3.9	2.9	2.8	2.7	2.5	2.9	2.7	2.5	2.7
7	2.7	3.5	2.6	3.6	2.9	3.7	2.7	4.4	2.9	2.7	2.5	2.7
8	2.7	3.3	2.5	3.4	2.8	3.0	2.7	4.0	2.8	2.6	2.5	2.6
9	2.6	4.2	2.5	3.3	2.8	2.8	2.6	3.0	2.8	2.6	2.5	2.6
10	2.6	4.8	2.5	3.2	2.7	2.7	2.6	2.6	2.7	2.6	2.5	2.9
11	5.9	3.8	4.4	3.1	2.7	2.7	2.5	4.3	2.7	2.5	2.5	2.8
12	11.4	3.5	4.1	3.1	2.7	3.1	2.5	3.2	3.0	2.5	2.5	2.7
13	11.5	3.2	3.2	3.1	2.7	2.9	2.4	2.8	2.8	3.0	2.6	2.6
14	5.0	3.1	3.0	5.5	2.6	4.6	2.4	5.5	2.7	3.0	2.6	2.7
15	4.1	3.0	2.9	4.9	2.6	11.1	2.6	6.0	2.7	2.8	2.5	5.3
16	3.4	2.9	2.8	3.9	2.6	11.2	2.6	10.0	2.75	2.7	2.5	4.2
17	3.4	2.9	2.7	3.5	2.6	5.0	4.6	8.4	6.6	2.7	2.5	3.1
18	3.0	2.9	2.7	3.4	3.0	3.9	3.2	5.4	14.8	2.6	2.5	2.9
19	3.0	2.8	2.6	3.6	3.5	3.6	4.6	3.9	8.6	2.6	2.6	2.8
20	2.9	2.8	2.6	4.4	5.7	3.3	6.3	4.3	4.6	2.6	2.6	2.7
21	2.8	2.7	3.0	4.3	5.7	3.2	3.5	6.7	3.6	2.6	2.7	2.7
22	2.8	2.7	2.9	4.0	7.9	3.2	2.8	5.4	3.3	2.6	2.6	2.6
23	2.8	2.7	2.8	3.5	7.7	3 8	2.7	7.3	3.1	2.5	2.6	2.6
24	2.9	2.8	2.8	3.3	4.0	3.6	2.6	9.0	3.0	2.5	2.6	3.1
25	3.6	2.8	2.8	3.2	3.4	4.8	2.5	5.1	2.9	2.5	2.6	3 0
26	3.1	2.7	14.25	3.2	3.5	4.0	2.5	4.3	2.9	2.5	2.6	3.0
27	2.9	2.7	13.35	3.2	3.3	3.8	3.2	5.5	2.8	2.5	2.5	3.0
28	2.9	2.7	8.4	3.2	3.1	3.7	2.8	8.4	2.9	2.5	2.5	4.0
29	2.8	.....	4.2	3.0	3.0	3.6	2.6	6.3	3.0	2.5	2.5	14.2
30	2.8	.....	3.6	2.8	2.9	5.9	2.6	6.5	2.9	2.5	2.5	19.9
31	3.5	.....	3.6	.....	2.9	.....	2.5	4 9	.....	2.5	.....	12.4
1902												
1	4.7	7.5	23.2	4.3	3.3	2.9	2.2	2.3	2.3	3.9	2.3	4.3
2	4.0	23.2	9.5	4.0	3.4	2.8	2.2	2.2	2.2	3.6	2 2	3.6
3	3.7	17.1	5.8	3.8	3.3	2.7	2.3	3.1	2.2	2.7	2.2	6 6
4	3.5	6.3	4.8	3.8	3.3	2.7	2.8	3.0	2.2	2.6	2 1	6.4
5	3.4	5.7	4.4	3.7	3.2	2.6	2.6	2.7	2.2	3.6	2.2	4.5
6	3.3	4.1	4.2	3.7	3.7	2.6	2.3	2.5	2.2	3.0	2.5	4.0
7	3.2	3.8	3.9	3.7	3.3	2.6	2.2	2.3	2.1	2.65	2.5	3.3
8	3.1	3.5	3.8	3.6	3.2	2.8	2.4	2.2	2.1	2.45	2.3	3.0
9	3.1	3.4	4.0	3.5	3.2	2.6	2.8	2.1	3.3	2.4	2.3	2.9
10	3.0	3.4	3.9	3.4	3.1	2.5	2.4	2.1	4.7	2.3	2.3	2.7

Daily gage height, in feet, of Broad River (of Georgia) near Carlton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1898												
1	2.05	2.25	1.9	3.6	2.2	1.6	1.4	2.1	9.1	2.15	2.35	2.75
2	2.0	2.15	1.9	2.75	2.15	1.6	1.35	1.95	18.35	2.1	2.35	2.55
3	1.95	2.1	1.95	2.45	2.05	1.6	1.35	1.8	18.53	3.2	2.3	2.8
4	1.95	2.05	2.1	2.3	2.05	1.6	1.4	3.0	13.38	4.85	2.3	3.9
5	1.95	2.0	2.15	5.25	2.0	1.55	1.8	3.85	7.88	11.2	2.3	3.5
6	1.95	2.05	2 05	4.45	2.0	1.5	2.85	4.0	5.0	10.1	3.2	3.1
7	1.95	2.05	2.0	3.0	2.0	1.45	3.5	4.2	4.6	4.35	2.4	2.85
8	1.95	2.0	1.95	2.6	1.95	1.45	2.6	3.4	4.5	3.25	2.35	2.7
9	1.95	2.0	1.9	2.45	1.95	1.4	2.3	2.5	3.5	2.9	2.35	2.6
10	1.9	2.0	1.9	2.4	1.9	1.35	1.95	2.2	2.9	2.7	2.65	2.55
11	1.9	2.0	1.85	2.45	1.9	1.3	1.7	3.05	2.35	2.6	2.45	2.55
12	1.9	2.0	1.85	2.35	1.9	1.45	1.6	6.2	2.7	2.5	2.4	2.5
13	1.9	1.95	1.85	2.25	1.85	2.0	4.9	4.05	2.55	2.45	2.45	2.5
14	1.9	1.95	2.35	2.3	1.85	1.6	3.2	3.5	2.45	2.4	2.95	2.45
15	1.9	1.95	2.8	2.3	1.85	1.5	1.85	3.0	2.4	2.3	2.9	2.4
16	1.9	1.9	2.4	2.25	1.8	1.5	3.55	2.7	2.35	2.25	2.75	2.4
17	1.85	1.9	2.45	2.15	1.8	1.5	2.55	2.35	2.35	2.25	3.0	2.45
18	1.85	1.95	2.35	2.1	1.8	2.4	2.0	3.25	2.25	2.7	3.0	2.45
19	1.85	2.05	2.25	2.05	1.85	2.35	1.8	6.95	2.25	3.35	3.55	2.45
20	2.15	2.0	2.1	2.1	2.15	1.8	3.6	2.2	2.65	3.4	2.7	
21	2.55	2.0	2.05	2.05	1.85	1.8	1.7	3.0	2.2	3.6	2.9	3.0
22	2.35	1.95	2.0	2.0	1.8	1.6	1.65	2.85	2.25	4.45	2.7	3.65
23	2.2	1.95	1.95	2.0	1.8	1.55	9.0	2.55	2.4	3.65	2.7	4.05
24	2.9	1.9	1.95	2.95	1.95	1.55	6.0	2.25	3.45	3.0	2.6	4.85
25	4.9	1.9	1.95	2.75	2.1	1.5	4.2	2.1	2.55	2.65	2.55	3.65
26	5.1	1.85	1.9	2.3	1.8	1.5	3.1	2.45	2.35	2.55	2.5	3.1
27	3.3	1.9	1.9	2.6	1.75	2.3	2.6	2.6	2.25	2.45	2.45	2.8
28	3.05	1.95	1.85	3.3	1.65	1.55	6.4	3.0	2.2	2.4	2.4	2.7
29	2.7	.....	1.95	2.6	1 6	1.5	4.6	2.7	2.2	2.4	2.75	2.65
30	2.5	.....	3.35	2.35	1.6	1.45	2.7	2.5	2.15	2.45	3.0	2.6
31	2.35	.....	4.4	.....	1.6	.....	2.35	2.35	.....	2.4	.....	2.65
1899												
1	3.1	3.45	5.2	5.8	3.0	2.6	2.3	2.4	3.8	1.9	2.15	2.35
2	2.95	3.0	4.1	4.45	3.0	2.55	2.25	2.35	3.0	1.9	2.1	2.4
3	2.75	3.75	3.3	3.6	2.95	2.5	2.2	2.25	2.5	1.9	2.1	2.3
4	2.7	3.7	3.6	3.65	2.95	2.5	2.2	2.2	2.3	1.9	2.05	2.3
5	2.65	4.3	3.95	3.7	3.0	2.45	2.2	2.2	2.2	2.0	2.05	2.25
6	4.45	7.2	4.2	3.45	3.2	2.4	2.2	2.15	2.15	2.2	2.05	2.2
7	6.45	13.18	3.65	3.6	3.15	2.4	2.25	2.1	2.1	2.15	2.05	2.2
8	6.4	10.6	3.45	4.4	3.0	2.5	2.4	2.1	2.1	4.3	2.05	2.2
9	3.9	5.45	3.4	4.2	2.95	2.6	2.3	2.1	2.1	3.4	2.05	2.2
10	3.3	4.3	3.35	3.6	2.95	2.45	2.4	2.1	2.1	2.5	2.05	2.2
11	3.8	3.75	3.3	3.5	2.9	2.4	2.3	2.15	2.5	2.35	2.05	2.2
12	4.05	3.6	3.3	3.4	2.85	2.6	2.25	2.1	2.1	2.25	2.05	3.4
13	3.7	3.45	3.25	3.3	2.8	3.7	2.2	2.15	2.5	2.2	2.05	3.6
14	3.45	3.35	3.5	3.3	2.8	3.0	2.2	2.05	2.0	2.15	2.05	2.95
15	3.75	3.3	4.4	3.25	2.75	2.4	2.15	2.0	2.0	2.1	2.1	2.5
16	3.5	4.4	13.88	3.25	2.75	2.5	2.1	1.95	1.95	2.1	2.1	2.45
17	3.5	5.05	11.3	3.2	2.7	2.65	2.1	1.9	1.95	2.1	2.05	2.35
18	3.25	4.45	4.7	3.15	2.7	2.65	2.25	1.9	1.95	2.1	2.05	2.3
19	3.1	3.8	4.5	3.25	2.65	2.55	2.15	1.9	1.95	2.1	2.05	2.3
20	3.0	3.5	3.1	3.2	2.65	2.45	2.1	1.9	2.05	2.1	2.05	2.3
21	2.9	3.55	5.2	3.15	2.6	2.4	2.1	2.0	2.0	2.1	2.05	2.25
22	2.85	3.6	4.0	3.1	2.65	2.35	2.05	1.95	2.0	2.05	2.05	2 25
23	2.95	3.5	4.15	3.05	2.7	2.3	2.2	2.0	2.0	2.05	2.65	2.2
24	3.05	3.3	4.55	3.1	2.65	2.3	2.25	1.95	1.95	2.05	3.45	4.4
25	3.0	3.2	3.75	3.2	2.6	2.3	2.15	2.0	1.95	2.05	2.45	4.3
26	2.95	3.15	3.6	3.5	2.6	3.7	2.45	2.05	1.95	2.05	3.6	3.0
27	2.85	15.78	3.5	3.2	2.6	3.0	6.5	3.95	2.0	2.05	3.7	2.6
28	2.8	11.15	3.45	3.15	2.55	2.8	5.3	2.45	1.95	2.05	2.9	2.6
29	2.8	.....	4.2	3.1	2.55	2.8	3.5	2.1	1.95	2.05	2.55	2.6
30	2.75	.....	3.7	3.1	2.5	2.5	2.8	3.5	1.9	2.1	2.4	2.5
31	3.1	.....	5.0	.....	2.7	.....	2.5	4.1	.....	2.15	.....	2.45
1900												2.4
1	2.4	2.3	5.5	3.1	3.4	2.6	3.5	3.7	2.3	2.1	2.4	2.4
2	2.4	2.3	4.9	3.1	3.2	2.5	3.3	3.8	2.5	2.1	2.4	2.4
3	2.4	2.3	3.85	3.0	4.7	2.8	3.4	3.6	2.5	2.1	6.5	4.2
4	2.35	2.3	3.3	3.1	3.9	2.9	3.2	3.6	2.3	2.2	3.5	5.0
5	2.35	3.3	3.15	3.0	3.2	2.9	3.0	2.5	2.2	2.3	2.8	

Daily gage height, in feet, of Broad River (of Georgia) near Carlton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900												
6	2.3	2.95	3.0	3.0	3.1	3.0	2.9	2.5	2.2	2.5	2.6	3.8
7	2.3	2.7	3.0	2.9	3.0	4.3	2.8	2.5	2.1	3.0	2.5	3.2
8	2.3	2.65	6.5	2.8	3.0	7.7	2.8	2.4	2.1	2.6	2.4	2.8
9	2.3	2.8	6.8	2.8	2.9	7.6	2.8	2.4	2.1	2.5	2.4	2.7
10	2.4	4.0	5.1	2.7	2.9	3.8	2.7	2.3	2.1	2.4	2.4	2.6
11	2.9	6.0	3.8	3.5	2.9	3.2	2.6	2.3	2.1	2.3	2.4	2.6
12	5.85	10.5	3.3	3.9	2.8	3.1	2.9	2.3	2.0	2.3	2.4	2.5
13	4.9	22.2	3.2	3.9	2.8	3.1	3.05	4.0	2.0	2.7	2.3	2.5
14	3.3	16.9	3.1	3.3	2.8	3.8	3.55	2.5	2.1	2.6	2.3	2.8
15	2.95	8.0	3.0	3.1	2.7	3.1	3.0	2.4	5.5	2.4	2.3	2.6
16	2.75	4.3	4.2	3.0	2.7	3.5	2.9	2.4	5.0	2.3	2.3	2.5
17	2.65	3.7	3.3	2.9	2.7	4.3	2.8	2.5	4.0	2.2	2.3	2.4
18	3.15	3.3	3.3	3.9	2.7	5.6	2.7	2.5	2.8	2.2	2.3	2.4
19	3.6	3.2	3.1	7.5	3.0	4.9	2.6	2.6	2.5	2.2	2.4	2.4
20	3.75	3.1	4.6	6.7	2.9	3.5	2.6	2.4	2.4	2.2	2.4	2.8
21	3.7	3.1	4.1	3.0	2.7	3.1	2.5	2.3	2.3	2.2	2.4	3.8
22	2.85	3.8	3.7	12.2	2.7	3.0	2.5	2.2	2.3	2.1	2.5	3.3
23	2.7	3.65	3.4	5.8	2.7	4.2	2.5	2.3	2.3	4.2	2.4	3.0
24	2.6	3.2	3.6	6.5	4.0	13.0	3.0	2.2	2.3	5.0	2.4	2.9
25	2.5	3.65	4.7	7.3	3.2	12.6	2.7	2.2	2.2	3.1	3.6	2.8
26	2.45	3.6	6.5	5.1	2.9	7.0	2.9	2.6	2.2	4.0	3.6	2.6
27	2.45	3.2	5.3	3.9	2.8	5.6	3.4	2.5	2.2	3.8	2.8	2.5
28	2.4	3.0	4.0	3.7	2.7	4.6	3.7	2.2	2.2	3.1	2.6	2.5
29	2.4	.....	3.5	3.5	2.7	4.0	3.4	2.2	2.2	2.7	2.5	2.5
30	2.35	.....	3.3	3.5	2.6	4.5	3.3	2.9	2.1	2.5	2.5	2.5
31	2.3	.....	3.25	.....	2.6	.....	3.9	2.2	.....	2.5	.....	3.3
1901												
1	3.6	3.2	2.6	3.6	2.7	4.3	3.9	2.4	5.0	2.9	2.5	2.5
2	3.2	2.9	2.6	6.9	2.6	3.9	3.1	2.3	3.9	2.9	2.5	2.5
3	3.6	3.8	2.6	11.95	2.6	3.3	3.0	2.3	3.5	4.8	2.5	3.0
4	3.5	7.9	2.6	9.3	2.6	3.0	2.9	2.3	3.1	2.9	2.5	3.4
5	3.3	6.3	2.6	4.5	2.5	2.9	2.8	2.3	3.0	2.8	2.6	3.4
6	2.8	4.1	2.6	3.9	2.9	2.8	2.7	2.5	2.9	2.7	2.5	2.7
7	2.7	3.5	2.6	3.6	2.9	3.7	2.7	4.4	2.9	2.7	2.5	2.7
8	2.7	3.3	2.5	3.4	2.8	3.0	2.7	4.0	2.8	2.6	2.5	2.6
9	2.6	4.2	2.5	3.3	2.8	2.8	2.6	3.0	2.8	2.6	2.5	2.6
10	2.6	4.8	2.5	3.2	2.7	2.7	2.6	2.6	2.7	2.6	2.5	2.9
11	5.9	3.8	4.4	3.1	2.7	2.7	2.5	4.3	2.7	2.5	2.5	2.8
12	11.4	3.5	4.1	3.1	2.7	3.1	2.5	3.2	3.0	2.5	2.5	2.7
13	11.5	3.2	3.2	3.1	2.7	2.9	2.4	2.8	2.8	3.0	2.6	2.6
14	5.0	3.1	3.0	5.5	2.6	4.6	2.4	5.5	2.7	3.0	2.6	2.7
15	4.1	3.0	2.9	4.9	2.6	11.1	2.6	6.0	2.7	2.8	2.5	5.3
16	3.4	2.9	2.8	3.9	2.6	11.2	2.6	10.0	2.75	2.7	2.5	4.2
17	3.4	2.9	2.7	3.5	2.6	5.0	4.6	8.4	6.6	2.7	2.5	3.1
18	3.0	2.9	2.7	3.4	3.0	3.9	3.2	5.4	14.8	2.6	2.5	2.9
19	3.0	2.8	2.6	3.6	3.5	3.5	4.6	3.9	8.6	2.6	2.6	2.8
20	2.9	2.8	2.6	4.4	5.7	3.3	6.3	4.3	4.6	2.6	2.6	2.7
21	2.8	2.7	3.0	4.3	5.7	3.2	3.5	6.7	3.6	2.6	2.7	2.7
22	2.8	2.7	2.9	4.0	7.9	3.2	2.8	5.4	3.3	2.6	2.6	2.6
23	2.8	2.7	2.8	3.5	7.7	3.8	2.7	7.3	3.1	2.5	2.6	2.6
24	2.9	2.8	2.8	3.3	4.0	3.6	2.6	9.0	3.0	2.5	2.6	3.1
25	3.6	2.8	2.8	3.2	3.4	4.8	2.5	5.1	2.9	2.5	2.6	3.0
26	3.1	2.7	14.25	3.2	3.5	4.0	2.5	4.3	2.9	2.5	2.6	3.0
27	2.9	2.7	13.35	3.2	3.3	3.8	3.2	5.5	2.8	2.5	2.5	3.0
28	2.9	2.7	8.4	3.2	3.1	3.7	2.8	8.4	2.9	2.5	2.5	4.0
29	2.8	.....	4.2	3.0	3.0	3.6	2.6	6.3	3.0	2.5	2.5	14.2
30	2.8	.....	3.6	2.8	2.9	5.9	2.6	6.5	2.9	2.5	2.5	19.9
31	3.5	.....	3.6	.....	2.9	.....	2.5	4.9	.....	2.5	.....	12.4
1902												
1	4.7	7.5	23.2	4.3	3.3	2.9	2.2	2.3	2.3	3.9	2.3	4.3
2	4.0	23.2	9.5	4.0	3.4	2.8	2.2	2.2	2.2	3.6	2.2	3.6
3	3.7	17.1	5.3	3.8	3.3	2.7	2.3	3.1	2.2	2.7	2.2	6.6
4	3.5	6.3	4.8	3.8	3.3	2.7	2.8	3.0	2.2	2.6	2.1	6.4
5	3.4	5.7	4.4	3.7	3.2	2.6	2.6	2.7	2.2	3.6	2.2	4.5
6	3.3	4.1	4.2	3.7	3.7	2.6	2.3	2.5	2.2	3.0	2.5	4.0
7	3.2	3.8	3.9	3.7	3.3	2.6	2.2	2.3	2.1	2.65	2.5	3.3
8	3.1	3.5	3.8	3.6	3.2	2.8	2.4	2.2	2.1	2.45	2.3	3.0
9	3.1	3.4	4.0	3.5	3.2	2.6	2.8	2.1	3.3	2.4	2.3	2.9
10	3.0	3.4	3.9	3.4	3.1	2.5	2.4	2.1	4.7	2.3	2.3	2.7

Daily gage height, in feet, of Broad River (of Georgia) near Carlton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1902												
11	3.0	3.3	3.8	3.4	3.1	2.5	2.4	2.1	3.6	2.5	2.3	2.7
12	2.9	3.3	3.8	3.3	3.1	2.5	2.7	2.6	2.6	3.5	2.3	2.6
13	2.9	3.3	4.6	3.3	3.0	2.5	2.6	2.3	2.8	2.9	2.2	2.8
14	2.9	3.2	4.3	3.3	3.4	2.5	2.4	5.0	2.8	2.7	2.2	2.8
15	2.9	3.3	4.4	3.3	3.1	2.7	4.8	4.8	2.6	2.8	2.2	2.8
16	2.9	3.5	5.1	3.8	3.0	3.3	3.4	3.0	2.5	2.5	2.2	2.9
17	2.8	3.6	8.5	4.0	3.0	2.8	2.6	3.5	2.3	2.5	2.2	4.3
18	2.8	3.5	6.0	4.6	3.0	2.6	2.4	3.0	2.3	2.4	2.9	3.6
19	2.9	3.4	4.2	3.6	3.0	2.6	2.3	2.4	2.8	2.3	2.9	3.1
20	3.0	3.5	3.9	3.6	3.0	3.0	2.3	2.9	2.4	2.3	2.5	2.9
21	3.0	3.6	3.7	3.5	3.1	2.7	2.3	2.9	2.5	2.3	2.4	2.8
22	3.1	4.0	3.7	3.4	3.0	2.6	2.3	2.3	2.3	2.3	2.4	3.8
23	2.9	3.6	3.6	3.3	3.0	2.5	2.2	2.5	2.2	2.3	2.4	3.4
24	2.8	3.5	3.6	3.3	2.9	2.4	2.2	2.4	2.2	2.3	2.3	3.1
25	2.9	4.4	3.5	3.3	2.9	2.4	2.3	2.3	5.9	2.2	2.3	3.0
26	2.8	4.6	3.5	3.2	2.8	2.4	2.3	2.3	8.2	2.2	4.6	2.8
27	2.8	3.9	3.5	3.2	2.8	2.4	2.2	2.2	4.6	2.3	4.0	2.8
28	3.0	24.5	3.9	3.1	2.7	2.4	3.1	2.4	3.4	2.5	3.9	2.6
29	4.4	.....	15.0	3.1	2.7	2.3	3.3	3.6	3.6	2.3	3.0	2.6
30	3.9	.....	12.0	3.2	2.6	2.3	2.3	3.1	3.3	2.3	2.6	3.3
31	4.1	.....	6.5	.....	2.6	.....	2.3	2.5	.....	2.3	.....	3.3
1903												
1	3.0	3.1	7.9	5.8	3.2	4.3	3.0	3.1	2.2	2.2	2.3	2.2
2	3.1	3.0	5.2	4.4	3.1	4.6	2.9	2.7	2.2	2.2	2.3	2.2
3	3.9	3.6	4.0	4.2	3.1	6.0	3.0	3.1	2.2	2.2	2.9	2.2
4	3.7	7.0	3.7	4.4	3.7	4.5	3.4	3.5	2.1	2.2	3.1	2.2
5	3.4	7.8	3.6	4.0	3.5	4.6	2.9	3.7	2.1	2.2	3.0	2.2
6	3.1	5.2	3.7	3.8	3.2	6.1	2.8	3.2	2.1	2.2	3.1	2.3
7	3.0	3.8	3.7	3.7	3.1	8.0	3.3	3.6	2.2	2.2	2.5	2.3
8	2.8	17.6	3.8	4.1	3.1	6.0	2.9	2.5	2.2	2.3	2.4	2.2
9	2.8	11.2	3.6	4.8	3.1	4.8	2.8	2.4	2.2	2.4	2.3	2.2
10	2.8	5.6	4.3	4.1	3.0	4.4	2.7	2.4	2.2	2.3	2.3	2.3
11	2.9	6.5	5.7	3.8	3.0	3.6	2.7	5.3	2.1	2.2	2.3	2.2
12	4.9	10.4	5.8	3.6	2.9	4.8	3.2	3.3	2.1	2.2	2.3	2.2
13	4.7	7.5	4.6	3.6	3.0	3.9	5.5	2.7	2.1	2.2	2.3	2.3
14	3.5	4.4	3.9	6.8	3.2	3.3	4.9	2.7	2.1	2.2	2.3	2.5
15	3.2	4.0	3.7	5.5	3.6	3.2	3.3	4.7	3.2	2.2	2.3	2.3
16	3.1	3.8	3.6	4.0	3.3	3.1	2.9	4.0	4.4	2.2	2.3	2.3
17	2.9	13.1	3.4	3.7	3.1	3.1	2.8	2.9	4.3	2.3	2.3	2.2
18	2.9	12.7	3.4	3.6	3.1	3.0	2.7	7.3	3.2	2.6	2.4	2.2
19	2.8	4.9	3.3	3.5	3.0	3.0	2.7	4.0	2.6	2.4	2.3	2.1
20	2.8	4.1	3.2	3.5	3.0	2.9	2.6	3.6	2.5	2.3	2.3	2.2
21	2.9	3.8	4.1	3.5	3.2	3.1	2.6	2.8	2.5	2.3	2.3	2.5
22	2.8	3.7	5.5	3.4	3.0	2.9	2.5	2.7	2.4	2.2	2.3	2.4
23	2.7	3.5	13.2	3.4	3.0	2.8	2.5	2.6	2.4	2.2	2.2	2.3
24	2.9	3.4	21.0	3.3	2.9	2.8	2.5	2.5	2.4	2.2	2.2	2.2
25	3.1	3.3	10.7	3.3	2.9	2.7	2.4	2.5	2.3	2.2	2.2	2.3
26	3.0	3.3	5.0	3.4	2.8	2.7	2.4	2.5	2.3	2.2	2.2	2.7
27	2.9	3.2	4.4	3.4	2.8	3.1	2.4	2.4	2.3	2.2	2.2	2.5
28	3.1	6.0	4.2	3.3	2.9	5.6	2.3	2.4	2.3	2.1	2.2	2.4
29	3.7	.....	5.4	3.3	2.8	3.6	2.4	2.4	2.2	2.1	2.2	2.3
30	4.3	.....	9.0	3.2	2.9	3.3	2.7	2.3	2.2	2.1	2.2	2.2
31	3.4	.....	9.0	.....	4.0	.....	2.8	2.3	.....	2.2	.....	2.2
1904												
1	2.2	2.6	2.6	2.5	2.2	2.4	2.1	1.6	1.9	1.5	1.6	1.9
2	2.2	2.5	2.6	2.5	2.2	2.5	2.0	2.6	1.9	1.5	1.6	2.0
3	2.3	2.4	2.8	2.5	2.1	2.1	1.9	2.4	1.8	1.5	1.7	2.5
4	2.3	2.4	2.8	2.4	2.1	2.0	1.8	2.0	2.4	1.5	1.9	2.1
5	2.2	2.3	2.6	2.4	2.1	1.9	1.7	1.9	3.2	1.5	2.1	2.4
6	2.2	2.3	2.6	2.4	2.1	1.9	1.7	2.8	2.8	1.5	2.0	4.2
7	2.2	2.5	3.7	2.6	2.2	2.1	1.6	2.5	2.7	1.5	1.8	3.2
8	2.3	3.4	5.7	2.6	2.2	2.2	1.6	6.5	2.1	1.5	1.7	2.6
9	2.3	3.1	4.8	2.7	3.5	1.9	4.2	10.4	2.0	1.5	1.7	2.4
10	2.2	3.0	3.4	2.5	3.0	1.9	2.7	6.3	1.9	1.5	1.6	2.2
11	2.3	3.3	3.0	2.5	2.4	1.8	2.0	4.2	1.8	1.5	1.6	2.3
12	2.3	3.0	2.8	2.4	2.2	1.8	2.0	3.3	1.8	1.5	1.6	2.1
13	2.4	2.7	2.7	2.4	2.2	1.8	2.0	3.0	1.8	1.5	2.0	2.0
14	2.4	2.6	2.9	2.3	2.1	1.8	1.8	2.7	1.7	1.5	2.2	2.0
15	2.3	2.6	3.0	2.3	2.1	1.7	1.7	2.5	1.7	1.5	2.0	2.0

Daily gage height, in feet, of Broad River (of Georgia) near Carlton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
16	2.2	2.5	2.8	2.8	2.1	1.7	1.6	2.6	1.7	1.5	1.9	2.0
17	2.3	2.5	2.7	2.4	2.0	1.7	2.1	2.4	1.6	1.5	1.9	2.0
18	2.5	2.4	2.6	2.4	2.0	1.6	1.8	2.2	1.6	1.5	1.8	2.0
19	2.4	2.4	2.6	2.3	2.0	1.8	1.6	2.1	1.6	1.5	1.8	2.0
20	2.2	3.6	2.5	2.3	2.0	1.7	1.5	4.2	1.6	1.5	1.7	1.9
21	2.2	3.3	2.5	2.4	1.9	2.5	1.5	2.9	1.6	1.5	1.7	1.9
22	2.2	4.8	4.0	2.3	1.9	2.1	1.6	2.1	2.1	1.5	1.7	1.9
23	3.8	4.6	3.4	2.3	1.9	2.0	1.9	2.0	1.6	1.5	1.9	1.9
24	3.2	3.7	4.3	2.2	1.9	1.7	1.8	1.9	1.6	1.5	2.3	1.9
25	2.7	3.4	3.5	2.2	1.8	1.7	1.6	1.9	1.6	1.5	2.0	2.0
26	2.5	2.9	3.3	2.3	1.8	1.6	2.6	1.9	1.6	1.6	1.9	2.1
27	2.4	2.8	3.0	2.4	1.8	1.6	1.9	3.1	1.6	1.7	1.8	2.1
28	2.4	2.7	2.9	2.3	1.8	1.6	1.7	3.3	1.6	1.7	1.8	3.3
29	2.5	2.6	2.7	2.2	1.8	1.9	3.0	2.9	1.6	1.6	1.7	3.0
30	2.6	.....	2.6	2.2	3.0	2.3	1.8	2.2	1.5	1.6	1.7	2.5
31	2.5	.....	2.6	.....	3.4	.....	1.6	2.0	.....	1.6	.....	2.3
1905												
1	2.2	2.0	2.5	2.1	2.2	2.3	6.3	1.7	1.6	1.4	1.65	1.7
2	2.2	2.0	2.5	2.1	2.1	2.1	4.3	1.6	3.0	1.5	1.65	1.7
3	2.2	2.0	2.5	2.1	2.2	2.1	3.0	1.6	2.4	1.6	1.65	9.4
4	2.1	2.0	2.4	2.1	5.3	2.0	2.2	1.6	2.0	2.0	1.6	8.4
5	2.0	2.0	2.4	2.2	3.4	2.0	2.4	1.6	1.7	2.2	1.6	4.2
6	2.0	2.2	2.4	2.3	4.9	1.9	8.2	1.6	1.7	1.7	1.6	3.5
7	2.6	2.6	2.3	2.2	6.8	1.9	3.6	1.6	1.7	1.6	1.7	3.0
8	2.7	3.0	2.3	2.1	6.9	1.9	2.8	1.6	1.6	1.5	1.65	2.5
9	2.4	4.0	2.3	2.2	4.4	1.8	2.0	3.1	1.6	1.5	1.65	7.0
10	2.2	5.7	2.5	2.2	3.4	1.8	2.0	2.2	1.6	1.6	1.8	7.9
11	2.2	5.4	2.4	2.1	2.8	1.8	3.9	2.7	1.6	2.0	2.0	5.4
12	2.8	4.4	2.5	2.1	2.5	1.7	3.6	3.2	1.6	2.6	1.8	4.3
13	6.1	6.6	2.6	2.2	2.4	2.1	5.0	4.0	2.3	2.2	1.7	3.3
14	6.0	6.4	2.5	2.2	2.3	1.9	4.4	2.6	1.9	1.8	1.7	2.9
15	3.5	4.7	2.4	2.1	2.2	3.0	3.3	2.6	1.7	1.7	1.7	3.0
16	3.0	3.3	2.4	2.1	2.3	2.0	3.0	2.4	1.6	1.7	1.6	3.0
17	2.7	3.0	2.3	2.1	2.7	2.0	2.5	2.0	1.6	1.7	1.6	2.7
18	2.6	2.9	2.2	2.1	2.5	2.0	2.3	2.0	1.5	1.65	1.6	2.6
19	2.4	2.8	2.2	2.0	2.4	2.0	2.1	2.2	1.5	1.7	1.6	2.6
20	2.6	3.0	2.2	2.0	2.2	2.7	2.6	2.0	1.5	1.7	1.65	4.3
21	2.5	7.8	2.3	2.0	2.2	1.9	2.0	1.9	1.5	1.7	1.95	7.8
22	2.4	8.5	2.3	2.0	2.2	2.2	2.5	1.9	1.5	1.6	1.9	5.7
23	2.2	5.0	2.3	2.0	2.4	2.0	2.3	1.8	1.5	1.6	1.7	3.0
24	2.2	3.7	2.3	2.0	4.5	2.0	2.0	2.2	1.4	1.6	1.7	2.5
25	2.1	3.3	2.3	2.0	4.4	1.9	1.8	2.2	1.4	1.6	1.7	2.4
26	2.1	3.0	2.2	2.0	2.9	1.9	1.8	2.8	1.4	1.8	2.1	2.3
27	2.1	2.8	2.2	2.0	2.8	1.7	1.8	2.6	1.4	2.0	2.1	2.2
28	2.1	2.7	2.1	2.0	2.7	1.7	1.7	2.2	1.4	1.8	1.95	2.2
29	2.0	.....	2.1	2.0	2.8	1.7	1.7	1.9	1.4	1.75	1.8	3.3
30	2.0	.....	2.1	2.1	2.6	1.6	1.7	1.7	1.4	1.7	1.75	2.9
31	2.0	.....	2.1	.....	2.3	.....	1.7	1.7	.....	1.7	.....	2.6
1906												
1	2.6	3.5	2.4	4.2	2.8	2.4	2.4	3.8	3.7	3.6	2.6	2.5
2	2.5	3.3	2.4	3.5	2.7	2.4	2.4	3.3	3.0	3.9	2.6	2.5
3	4.6	3.0	2.5	3.5	2.7	2.6	2.6	3.2	2.9	5.5	2.6	2.5
4	14.3	2.9	3.0	3.2	3.7	3.4	3.1	3.2	2.7	6.0	2.5	2.5
5	12.9	2.9	2.9	3.2	3.0	2.7	2.8	4.2	2.7	4.7	2.5	2.5
6	7.0	3.0	2.5	3.1	2.8	2.6	2.6	4.4	2.6	4.0	2.5	2.5
7	3.5	3.0	2.5	3.0	3.3	2.5	3.0	3.0	2.8	3.8	2.5	2.6
8	3.3	2.8	3.3	3.0	4.0	2.5	4.3	2.8	2.6	3.6	2.5	2.6
9	3.1	2.7	5.5	3.0	3.5	2.4	6.3	2.6	2.6	3.4	2.5	2.5
10	3.0	2.6	3.9	3.1	3.0	2.4	6.0	2.5	2.6	3.0	2.5	2.5

Daily gage height, in feet, of Broad River (of Georgia) near Carlton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
11	3.0	2.6	3.2	3.0	2.8	3.1	5.0	2.5	2.6	3.0	2.5	4.6
12	3.4	2.6	3.0	3.0	2.7	2.9	3.5	2.4	3.9	3.0	2.5	4.4
13	4.0	2.6	3.0	2.9	2.7	4.4	3.3	2.5	3.2	2.9	2.5	3.4
14	3.0	2.5	2.8	2.9	2.6	5.3	3.6	4.1	3.0	2.8	2.5	3.0
15	2.9	2.5	11.0	3.7	2.5	4.5	4.2	3.4	2.8	2.8	2.6	3.0
16	2.8	2.5	14.0	3.5	2.5	3.8	5.5	3.1	2.5	2.6	2.6	2.8
17	2.8	2.5	8.3	3.1	2.5	5.6	7.9	2.8	2.5	2.6	2.6	2.8
18	2.7	2.5	4.2	3.0	2.5	4.0	6.4	2.6	4.0	2.6	3.0	3.0
19	2.7	2.5	8.8	2.9	2.5	3.6	6.2	8.2	4.5	4.0	3.1	3.0
20	2.6	2.5	15.7	2.8	2.5	2.8	5.2	7.9	8.2	3.6	3.1	4.0
21	2.6	2.6	11.2	2.8	2.4	2.7	4.6	6.4	5.0	2.9	3.0	3.8
22	2.8	2.7	6.0	2.8	2.4	2.6	4.1	5.8	4.0	2.9	3.0	3.6
23	19.0	2.5	3.8	2.7	2.4	2.6	5.0	3.5	3.3	2.8	2.8	3.1
24	9.8	2.5	3.6	2.7	2.4	2.5	4.2	3.1	3.0	2.8	2.7	3.0
25	6.0	2.5	3.5	2.7	2.3	2.5	3.6	2.8	3.9	2.7	2.6	3.0
26	4.4	2.5	3.3	2.7	2.8	2.5	3.2	3.2	4.7	2.6	2.6	2.8
27	6.9	2.5	3.3	2.8	4.1	2.9	2.9	3.1	3.8	2.6	2.6	2.8
28	5.3	2.5	3.8	3.9	3.7	2.7	3.0	3.6	3.2	2.6	2.5	2.9
29	4.0	.....	4.0	3.0	3.2	2.6	3.8	4.6	3.6	2.6	2.5	3.0
30	3.8	.....	4.6	3.0	2.6	2.6	7.6	4.6	4.0	2.6	2.5	3.0
31	3.5	.....	4.8	.....	2.5	.....	4.6	4.0	.....	2.6	.....	3.6

Rating tables for Broad River (of Georgia) near Carlton.

JULY 1 TO DECEMBER 31, 1897.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft*
1.50	315	2.50	978	3.50	1,683	4.50	2,393
1.60	360	2.60	1,044	3.60	1,754	4.60	2,464
1.70	410	2.70	1,115	3.70	1,825	4.70	2,535
1.80	476	2.80	1,186	3.80	1,896	4.80	2,606
1.90	547	2.90	1,257	3.90	1,967	4.90	2,677
2.00	618	3.00	1,328	4.00	2,038	5.00	2,748
2.10	689	3.10	1,399	4.10	2,109	5.50	3,100
2.20	760	3.20	1,470	4.20	2,180	6.00	3,460
2.30	831	3.30	1,541	4.30	2,251		
2.40	902	3.40	1,612	4.40	2,322		

JANUARY 1 TO DECEMBER 31, 1898.[b]

1.40	320	3.20	1,600	5.00	3,364	8.40	6,696
1.50	352	3.30	1,698	5.20	3,560	8.60	6,892
1.60	385	3.40	1,796	5.40	3,756	8.80	7,088
1.70	432	3.50	1,894	5.60	3,952	9.00	7,284
1.80	480	3.60	1,992	5.80	4,148	9.20	7,480
1.90	527	3.70	2,090	6.00	4,344	9.40	7,676
2.00	577	3.80	2,188	6.20	4,540	9.60	7,872
2.10	633	3.90	2,286	6.40	4,736	9.80	8,064
2.20	700	4.00	2,384	6.60	4,932	10.00	8,264
2.30	775	4.10	2,482	6.80	5,128	11.00	9,244
2.40	850	4.20	2,580	7.00	5,324	12.00	10,224
2.50	940	4.30	2,678	7.20	5,520	13.00	11,204
2.60	1,030	4.40	2,776	7.40	5,716	14.00	12,184
2.70	1,122	4.50	2,874	7.60	5,912	15.00	13,164
2.80	1,215	4.60	2,972	7.80	6,108	16.00	14,144
2.90	1,310	4.70	3,070	8.00	6,304	17.00	15,124
3.00	1,405	4.80	3,168	8.20	6,500	18.00	16,104
3.10	1,502	4.90	3,266				

JANUARY 1, 1899, TO DECEMBER 31, 1901.[c]

1.90	490	3.70	1,760	6.00	4,160	10.00	9,550
2.00	540	3.80	1,840	6.20	4,420	10.50	10,225
2.10	600	3.90	1,920	6.40	4,690	11.00	10,900
2.20	660	4.00	2,000	6.60	4,960	11.50	11,575
2.30	730	4.10	2,090	6.80	5,230	12.00	12,250
2.40	800	4.20	2,180	7.00	5,500	12.50	12,925
2.50	870	4.30	2,270	7.20	5,770	13.00	13,600
2.60	940	4.40	2,360	7.40	6,040	13.50	14,275
2.70	1,010	4.50	2,450	7.60	6,310	14.00	14,950
2.80	1,080	4.60	2,550	7.80	6,580	15.00	16,300
2.90	1,150	4.70	2,650	8.00	6,850	16.00	17,650
3.00	1,220	4.80	2,750	8.20	7,120	17.00	19,000
3.10	1,295	4.90	2,850	8.40	7,390	18.00	20,350
3.20	1,370	5.00	2,950	8.60	7,660	19.00	21,700
3.30	1,445	5.20	3,160	8.80	7,930	20.00	23,050
3.40	1,520	5.40	3,390	9.00	8,200	21.00	24,400
3.50	1,600	5.60	3,640	9.50	8,875	22.00	25,750
3.60	1,680	5.80	3,900				

a Above gage height 1.80 feet the rating curve is a tangent, the difference being 71 per tenth.
b Above gage height 3.10 feet the rating curve is a tangent, the difference being 98 per tenth.
c Above gage height 6.20 feet the rating curve is a tangent, the difference being 135 per tenth.

Rating tables for Broad River (of Georgia) near Carlton—Continued.

JANUARY 1 TO DECEMBER 31, 1902.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.10	420	2.70	870	3.30	1,365	3.90	1,890
2.20	490	2.80	950	3.40	1,450	4.00	1,980
2.30	565	2.90	1,030	3.50	1,535	4.10	2,070
2.40	640	3.00	1,110	3.60	1,620	4.20	2,165
2.50	715	3.10	1,195	3.70	1,710	4.30	2,260
2.60	790	3.20	1,280	3.80	1,800	4.40	2,355

JANUARY 1 TO DECEMBER 31, 1903.[b]

2.10	575	2.80	1,030	3.50	1,570	4.20	2,180
2.20	630	2.90	1,105	3.60	1,655	4.30	2,270
2.30	690	3.00	1,180	3.70	1,740	4.40	2,365
2.40	755	3.10	1,255	3.80	1,825	4.50	2,460
2.50	820	3.20	1,330	3.90	1,910	4.60	2,555
2.60	890	3.30	1,410	4.00	2,000	4.70	2,650
2.70	960	3.40	1,490	4.10	2,090	4.80	2,750

JANUARY 1, 1904, TO DECEMBER 31, 1905.

1.40	270	2.60	850	3.80	1,770	5.80	3,840
1.50	305	2.70	920	3.90	1,860	6.00	4,100
1.60	340	2.80	990	4.00	1,960	6.50	4,750
1.70	380	2.90	1,060	4.20	2,130	7.00	5,400
1.80	420	3.00	1,130	4.40	2,320	7.50	6,100
1.90	460	3.10	1,200	4.60	2,520	8.00	6,800
2.00	510	3.20	1,280	4.80	2,720	8.50	7,500
2.10	560	3.30	1,360	5.00	2,920	9.00	8,200
2.20	610	3.40	1,440	5.20	3,140	9.50	8,950
2.30	670	3.50	1,520	5.40	3,360	10.00	9,700
2.40	730	3.60	1,600	5.60	3,600	10.50	10,450
2.50	790	3.70	1,680				

a Above gage height 4.40 feet the above table is the same as the 1899 to 1901 table.

b Above gage height 4.80 feet this rating table is the same as the 1899 to 1901 table.

JANUARY 1, 1906, TO DECEMBER 31, 1906.

Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.30	645	3.60	1,535	4.90	2,730	9.00	8,220
2.40	695	3.70	1,620	5.00	2,880	10.00	9,760
2.50	750	3.80	1,705	5.20	3,100	11.00	11,360
2.60	805	3.90	1,790	5.40	3,325	12.00	13,000
2.70	865	4.00	1,880	5.60	3,560	13.00	14,700
2.80	930	4.10	1,970	5.80	3,800	14.00	16,400
2.90	1,000	4.20	2,065	6.00	4,050	15.00	18,100
3.00	1,070	4.30	2,160	6.20	4,300	16.00	19,800
3.10	1,140	4.40	2,255	6.40	4,560	17.00	21,500
3.20	1,215	4.50	2,350	6.60	4,820	18.00	23,200
3.30	1,290	4.60	2,450	6.80	5,080	19.00	24,900
3.40	1,370	4.70	2,555	7.00	5,360		
3.50	1,450	4.80	2,660	8.00	6,760		

NOTE.—The above table is based on discharge measurements made during 1904-1906 and is well defined below gage height 6 feet. Above gage height 6 feet it is based on one high-water measurement in 1899.

Estimated monthly discharge of Broad River (of Georgia) near Carlton.

[Drainage area, 762 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft.-per sq. mile	Depth in inches
1897					
July	3,671	443	979	1.28	1.48
August	2,428	385	641	0.84	0.97
September	831	315	380	0.50	0.56
October	978	315	468	0.61	0.70
November	1,434	385	547	0.72	0.80
December	1,115	547	748	0.98	1.13
1898					
January	3,462	505	887	1.16	1.34
February	738	505	575	0.75	0.78
March	2,776	505	730	1.00	1.15
April	3,609	577	1,078	1.41	1.57
May	700	385	524	0.69	0.79
June	850	300	422	0.55	0.61
July	7,284	300	1,455	1.91	2.20
August	5,275	480	1,533	2.01	2.32
September	16,937	666	2,961	3.89	4.34
October	9,440	632	1,786	2.34	2.70
November	1,948	775	1,099	1.44	1.61
December	3,217	850	1,319	1.73	1.99
The year	16,937	300	1,197	1.57	21.40
1899					
January	4,757	975	1,599	2.10	2.42
February	17,380	1,220	3,602	4.73	4.93
March	14,815	1,407	2,870	3.77	4.35
April	3,900	1,257	1,622	2.13	2.38
May	1,370	870	1,072	1.41	1.63
June	1,760	730	957	1.26	1.41
July	4,825	570	943	1.24	1.43
August	2,090	490	721	0.95	1.09
September	1,840	490	654	0.86	0.95
October	2,270	490	684	0.90	1.04
November	1,760	570	771	1.01	1.13
December	2,360	660	940	1.23	1.42
The year	17,380	490	1,370	1.80	24.18
1900					
January	3,965	730	1,146	1.50	1.73
February	26,020	730	3,468	4.55	4.74
March	5,230	1,220	2,171	2.85	3.29
April	12,520	1,010	2,651	3.48	3.88
May	2,650	940	1,168	1.53	1.76
June	13,600	870	2,994	3.93	4.38
July	1,920	870	1,227	1.61	1.86
August	2,000	660	958	1.26	1.45
September	3,510	540	908	1.19	1.33
October	2,950	600	1,001	1.31	1.51
November	4,825	730	1,043	1.37	1.53
December	2,950	800	1,155	1.52	1.75
The year	26,020	540	1,658	2.18	29.21
1901					
January	11,575	940	2,093	2.75	3.17
February	6,715	1,010	1,697	2.23	2.32
March	15,288	870	2,266	2.97	3.42
April	12,182	1,080	2,421	3.18	3.55
May	6,715	870	1,673	2.20	2.54
June	11,170	1,010	2,354	3.09	3.44
July	4,550	800	1,270	1.67	1.93
August	9,550	730	3,196	4.19	4.83
September	16,030	1,010	2,153	2.82	3.14
October	2,750	870	1,083	1.42	1.64
November	1,010	870	898	1.18	1.32
December	22,915	870	2,769	3.63	4.18
The year	22,915	730	1,989	2.61	35.48

Estimated monthly discharge of Broad River (of Georgia) near Carlton—Cont'd.

Month.	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1902.					
January	2,650	960	1,304	1.71	1.97
February	29,125	1,230	4,514	5.92	6.16
March	27,370	1,535	4,225	5.54	6.39
April	2,550	1,195	1,579	2.07	2.31
May	1,710	790	1,163	1.53	1.76
June	1,365	565	800	1.05	1.17
July	2,750	490	764	1.00	1.15
August	2,950	420	919	1.21	1.39
September	7,120	420	1,227	1.61	1.80
October	1,890	490	837	1.10	1.27
November	2,550	420	777	1.02	1.14
December	4,960	790	1,479	1.94	2.24
The year	29,125	420	1,632	2.14	28.75
1903.					
January	2,850	960	1,375	1.81	2.09
February	19,810	1,180	4,688	6.09	6.34
March	24,400	1,330	4,110	5.39	6.21
April	5,230	1,330	2,007	2.63	2.93
May	2,000	1,080	1,270	1.67	1.93
June	6,850	960	2,125	2.79	3.11
July	3,510	690	1,150	1.51	1.74
August	5,905	690	1,387	1.82	2.10
September	2,365	575	818	1.07	1.19
October	890	575	651	.85	.98
November	1,255	630	750	.98	1.09
December	960	575	683	.90	1.04
The year	24,400	575	1,747	2.29	30.75
1904.					
January	1,770	610	741	.972	1.12
February	2,720	670	1,113	1.46	1.58
March	3,720	790	1,247	1.64	1.89
April	920	610	720	.945	1.05
May	1,520	420	629	.825	.951
June	790	340	478	.627	.700
July	2,130	305	522	.685	.790
August	10,300	340	1,409	1.85	2.13
September	1,280	305	471	.618	.690
October	380	305	314	.412	.475
November	670	340	434	.570	.636
December	2,130	460	688	.903	1.04
The year	10,300	305	730	.959	13.05
1905.					
January	4,230	510	934	1.23	1.42
February	7,500	510	2,046	2.69	2.90
March	850	560	687	.902	1.04
April	670	510	555	.728	.812
May	5,270	560	1,392	1.83	2.11
June	1,130	340	514	.675	.753
July	7,080	380	1,277	1.68	1.94
August	1,960	340	630	.827	.953
September	1,130	270	382	.501	.559
October	850	270	407	.534	.616
November	560	340	397	.521	.581
December	8,800	380	2,184	2.87	3.31
The year	8,800	270	950	1.25	16.89
1906.					
January	24,900	750	3,620	4.75	5.48
February	1,450	750	871	1.14	1.19
March	19,300	695	3,630	4.76	5.49
April	2,060	865	1,150	1.51	1.68
May	1,970	645	989	1.30	1.50
June	3,560	695	1,200	1.57	1.75
July	6,620	695	2,340	3.07	3.54
August	7,050	695	1,870	2.45	2.82
September	7,050	750	1,530	2.01	2.24
October	4,050	805	1,330	1.75	2.02
November	1,140	750	834	1.09	1.22
December	2,450	750	1,120	1.47	1.70
The year	24,900	645	1,710	2.24	30.63

BROAD RIVER (SOUTH FORK) NEAR CARLTON

This station was established as a bench-mark station. It is located at Bull Bat Rock, about 1 mile south of Carlton, Ga. Discharge measurements are made at a shoal about 100 yards above the rock by means of a boat. The initial point for soundings is a small sweet-gum tree on the left bank. The channel is curved for 200 feet above and 500 feet below the station. The current is sluggish. The right bank is cultivated and the left is wooded. Both banks are subject to overflow at rare intervals. The bed of the stream is composed of rock and is very rough. The bench mark is composed of three copper nails driven into the gum tree, which forms the initial point for sounding. Its elevation is 5.00 feet above datum.

Discharge measurements of Broad River (South Fork) near Carlton.

Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*
July 20	1.00	64
September 7	1.20	115

MISCELLANEOUS MEASUREMENTS IN SAVANNAH RIVER DRAINAGE BASIN

Broad River (South Fork).—A measurement was made May 4, 1904, at the foot of the shoals below Watson's mill near Carlton, as follows:

Width, 50 feet; area, 81 square feet; mean velocity, 1.28 feet per second; discharge, 104 second-feet. The gage at Carlton read 2.20 feet.

The following measurement was made March 16, 1904, at the Seaboard Air Line railroad bridge, 1½ miles west of Comer. The bench mark is the top of the girder at sounding point 30. Its elevation is 49.00 feet above the datum of the gage.

Width, 74 feet; area, 68 square feet; mean velocity, 1.56 feet per second; gage height, 1.18 feet; discharge, 106 second-feet.

Chattooga River.—This river joins the Tallulah River and forms Tugaloo River. The following measurement was made November 16, 1905, from a small boat at a point about 5 miles northeast of Tallulah Falls, at a narrow channel about 1,000 feet below Atkins Ferry and opposite B. H. Atkin's residence. There is a small shoal

about 150 feet below and one 300 feet above the point of measurement. At the time of flood in 1876 the water is said to have been 36 to 40 feet higher than the present stage and did much damage to property. The bench mark is the center of the head of a wire nail driven horizontally into a sycamore stump, which stands on the right bank about 200 feet above the point of measurement; elevation, 6.13 feet above the datum of the assumed gage. The gage height at the same time at the regular station on Tallulah River at Tallulah Falls was 0.82 foot.

Width, 107 feet; area, 442 square feet; mean velocity, 0.77 foot per second; gage height, 2.00 feet; discharge, 339 second-feet.

Little River.—Two measurements were made June 6, 1905, near Washington. The bench mark is the top of the downstream wooden stringer under the cross-ties at the center of the first span of the railroad bridge at the right bank; elevation, 29.00 feet above the datum of the assumed gage.

Measurement at bridge of Washington Branch of Georgia Railroad: Width, 37 feet; area, 59 square feet; mean velocity, 0.58 foot per second; gage height, 1.40 feet; discharge, 34 second-feet.

Measurement at wagon bridge, 400 feet above railroad bridge; Width, 47 feet; area, 185 square feet; mean velocity, 0.19 foot per second; gage height, 1.40 feet; discharge, 35 second-feet.

Panther Creek.—The following measurement was made June 22, 1905, a short distance below where the Tallulah Falls Railroad crosses Panther Creek, near Tallulah Falls. The stage of the creek was probably somewhat high at the time of gaging, owing to showers the day before.

Width, 9 feet; area, 5.85 square feet; mean velocity, 1.17 feet per second; discharge, 6.82 second-feet.

Tiger Creek.—This stream is tributary to Tallulah River from the north, entering near Tallulah Falls. The following measurement was made June 13 from the railroad trestle, one-fourth mile northwest of Wiley.

Width, 14 feet; area, 11 square feet; mean velocity, 1.12 feet per second; discharge, 12.3 second-feet.

RIVER SURVEYS IN SAVANNAH RIVER DRAINAGE BASIN

TALLULAH RIVER

The elevations in the following list are based on a bronze tablet in rock 70 feet east of public road and 20 feet south of Tallulah Falls station, marked "1569 ATLANTA," the elevation of which is accepted as 1,568.302 feet above mean sea level in accord with the 1903 adjustment of the precise level net. The line is corrected to accord with primary work at mouth and at Burton.

The leveling was done in the summer of 1903 by Thomas B. O'Hagan, levelman, under the direction of Carroll Caldwell, field assistant.

Elevations on Tallulah River in Georgia from mouth near Tallulah Falls up to Blalock.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Junction of Chattooga and Tallulah rivers, water surface	754
0.0	100 feet north of junction of rivers, edge of river, point on rock	761.29
0.0	200 feet north of junction of rivers, west side of Tugaloo River, gum tree, nail in root of	762.65
0.2	Chattooga River, 500 feet north of, west side of Tallulah River, nail in root of oak stump	769.46
0.3	Water surface	767
0.4	Mouth of small stream, water surface	782
0.9	Water surface	818
1.3	Water surface	848
1.6	Water surface	878
1.7	Water surface	893
1.8	Water surface	911
2.0	Foot of rapids, water surface	935
2.1	Middle of rapids, water surface	944
2.2	Head of rapids, water surface	947
2.2	Foot of rapids, water surface	954
2.25	Water surface	964
2.3	Foot of small falls, water surface	981
2.35	Foot of rapids, water surface	987
2.38	300 feet below bend, head of rapids, water surface	980
2.4	Water surface	997
2.5	Water surface	1,008
2.6	Bridal Veil Falls, foot of, water surface	1,022
2.6	Head of falls, water surface	1,039
2.65	Water surface	1,057
2.8	Oceana Falls, foot of, water surface	1,074
2.85	Head of fal's, water surface	1,115
3.1	Hurricane Falls, foot of, water surface	1,140
3.1	Hurricane Falls, head of, water surface	1,229

Elevations on Tallulah River in Georgia from mouth near Tallulah Falls up to Blalock—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
3.1	Tempesta Falls, foot of, water surface	1,246
3.1	Tempesta Falls, head of, water surface	1,322
3.2	Ladore Falls, foot of, water surface	1,322
3.2	Ladore Falls, head of, water surface	1,350
3.3	Water surface	1,379
3.4	Water surface	1,396
3.6	Clayton road iron highway bridge, water surface	1,414
3.6	Tallulah Falls station, 70 feet east of public road, 20 feet south of station, in rock, bronze tablet marked "1569 ATLANTA"	1,568.302
3.6	Tallulah Falls, 0.5 mile northeast of, at fork of road, 50 feet south of bridge over river	1,457.92
3.6	Clayton road iron highway bridge, floor of	1,441.87
3.6	Clayton road iron highway bridge, water surface	1,419
3.6	Opposite stone pier railroad bridge, water surface	1,439
4.9	Foot of falls, water surface	1,486
4.9	Top of falls, water surface	1,492
5.1	Water surface	1,509
5.5	Head of island, water surface	1,530
5.6	Tallulah Falls Railroad, 20 feet west of, point on top of rock	1,538.21
5.6	Water surface	1,529
6.0	Water surface	1,538
6.5	Water surface	1,553
6.6	Water surface	1,559
7.3	150 feet east of river, in cornfield, dead apple tree, nail in root of	1,579.23
8.4	Water surface	1,573
8.6	Water surface	1,578
8.7	65 feet north of river, in cornfield, walnut tree, nail in root of	1,589.25
8.7	Water surface	1,578
9.6	Tiger Creek, on point of land between river and creek, burned poplar tree, nail in side of	1,590.30
9.6	Water surface	1,584
9.9	Water surface	1,589
10.0	5 feet west of river, on footpath, point on sharp rock	1,595.59
10.2	Water surface	1,592
10.4	Water surface	1,596
10.5	10 feet west of river, nail in root of beech tree	1,601.32
10.6	Water surface	1,600
10.9	Water surface	1,603
11.8	Crane Ford, 150 feet west of apple tree, nail in root of	1,620.33
11.8	Crane Ford, water surface	1,607
12.1	Water surface	1,610
13.3	Dockens Ford, 12 feet west of river, nail in side of dead tree	1,623.06
13.3	Dockens Ford, water surface	1,615
13.8	Ellerd Ford, 150 feet east of, poplar tree, nail in side of	1,634.36
13.8	Ellerd Ford, water surface	1,621
14.4	Water surface	1,626
14.5	Water surface	1,628
14.6	Eden Church, 150 feet west of, 150 feet east of river, nail in foot of large red-oak tree	1,649.41
15.6	Taylor Shoals, 10 feet west of river, middle of, point on large flat rock	1,644.90
15.6	Taylor Shoals, water surface	1,641
16.2	Water surface	1,648
16.5	Water surface	1,657
16.6	Water surface	1,657
17.7	James Smith boat landing, 2 feet west of river, nail in stump	1,670.53
18.4	Fall Creek, mouth of, water surface	1,669
18.6	Jones Ford, 6 feet south of river, slanting persimmon tree, nail in side of	1,677.33
18.6	Jones Ford, water surface	1,674.6
19.2	Flat Creek, mouth of, water surface	1,681
20.6	Water surface	1,687
20.9	Cliff Creek, mouth of, water surface	1,690
21.4	Water surface	1,697
21.5	Denton Ford, 10 feet west of river, nail in root of pine tree	1,703.61
21.5	Denton Ford, water surface	1,701
21.8	Mouth of small stream	1,703
21.9	Seal Creek, mouth of, foot of double shoals, water surface	1,704
22.0	Water surface	1,707
22.3	Middle of shoals, water surface	1,714

Elevations on Tallulah River in Georgia from mouth near Tallulah Falls up to Blalock—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
22.6	Crow Ford, 100 feet south of, 10 feet south of river, twin hemlock tree, nail in root of	1,725.93
22.6	Crow Ford, water surface	1,724
22.7	Scarecrow Creek, mouth of, water surface	1,727
24.0	George Creek, mouth of, water surface	1,737
24.5	Bridge Creek, mouth of, water surface	1,738
25.0	In shoals, water surface	1,747
25.1	Ford, water surface	1,749
25.1	Above ford, south edge of river, point on rock	1,750.29
25.6	Rocky Ford, 10 feet south of, dead hemlock tree, nail in root of	1,758.47
25.6	Rocky Ford, water surface	1,756
25.9	Water surface	1,757
26.2	Kenny Creek, mouth of, water surface	1,760
26.3	Fuller Ford, water surface	1,760
26.4	Fuller Ford, 500 feet northwest of, point on rock	1,762.62
27.0	Water surface	1,767
27.3	Cannon Ford, 75 feet southwest of, nail in foot of white oak	1,781.97
27.3	Cannon Ford, water surface	1,769
28.2	Ford, west side of, nail in root of red-gum tree	1,777.87
28.2	Ford, water surface	1,774
28.5	Wildcat Creek, 50 feet southwest of, west side of road, point on rock	1,783.19
28.5	Wildcat Creek, water surface	1,776
29.3	Water surface	1,785
29.5	Water surface	1,787
29.6	Mouth of Dicks Creek, water surface	1,789
30.1	Burton, 12 feet southwest of bridge, nail in root of maple tree	1,794.96
30.1	Burton, floor of bridge	1,806.4
30.1	Burton, water surface	1,790
30.1	Burton, high water	1,804
30.2	Burton, 1,000 feet above bridge, 15 feet east of river, 10 feet west of road, bronze tablet	1,795.140
32.1	12 feet west of ford, nail in side of ash tree	1,819.04
32.1	Water surface	1,813
32.4	Water surface	1,819
32.7	Mur Ford, 100 feet southwest of, nail in west side of white-oak tree	1,838.05
32.7	Mur Ford, water surface	1,824
33.0	Rocky Ford, water surface	1,829
33.1	Shallow Ford, 500 feet southeast of, in road, point on rock	1,841.48
33.2	Water surface	1,835
33.6	Deep Ford, 30 feet south of, nail in side of sycamore tree	1,842.39
33.6	Deep Ford, water surface	1,839
34.3	Popcorn Creek, mouth of	1,849
35.8	Persimmon Creek, 75 feet east of river, 30 feet south of creek, nail in side of hickory tree	1,881.67

SURVEY OF TUGALOO AND SAVANNAH RIVERS.

The elevations in the following list are based on an aluminum tablet marked "1050 M. C.," at the Washington street entrance to the State capitol at Atlanta, the elevation of which is accepted as 1,049.546 feet above mean sea level. The initial point on which these levels depend is a bronze tablet at the north side of east entrance at court-house at Clarkesville, Ga., marked "1373 ATLANTA," the elevation of which is accepted as 1,371.991 feet above mean sea level, in accordance with the 1903 adjustment of the precise level net.

The leveling on Tugaloo, and on Savannah River from Tugaloo River to Broad River, was done in the summer of 1903, under the direction of Carroll Caldwell, field assistant, by Thomas B. O'Hagan, levelman.

The survey of Savannah River from Broad River to Augusta, Ga., was made by C. M. Pritchett, in January, 1903, for the United States Geological Survey.

Elevations on Tugaloo and Savannah rivers from head of Tugaloo River to Augusta.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Nail in root of gum tree, west side of Tallulah River, 200 feet northwest of junction of Tallulah and Chattooga rivers	762.65
0.0	Point on rock, edge of river, 100 feet northwest of junction of Tallulah and Chattooga rivers	761.29
0.0	Point on rock, edge of river, 100 feet northwest of junction of Tallulah and Chattooga rivers, water surface	754

TUGALOO RIVER TO JUNCTION WITH SENECA RIVER.

0.7	Nail in root of pine tree, below head of Tugaloo river	728.86
0.7	Head of island, water surface	723
0.8	Water surface	711
2.0	Water surface	698
2.0	Point on rock, west side of river	698.79
2.1	Water surface	690
2.4	Water surface	686
2.8	Nail in root of hickory tree	690.51
2.8	Water surface	684
2.9	Water surface	681
3.1	Mouth of small stream, water surface	674
4.4	Mouth of Panther Creek, water surface	669
4.4	Bronze tablet marked "715 ATLANTA," in large rock, west edge of public road, 600 feet south of mouth of Panther Creek, 50 feet west of river	713.793
5.3	Water surface	667
5.4	Dieton Ford, water surface	666
5.0	Water surface at small bridge	664
5.4	Nail in root of walnut tree	676.45
6.3	Water surface	659
6.4	Mouth of small creek, South Carolina side, water surface	655
7.4	Nail in root of walnut tree, 100 feet west of river	664.87
7.5	Water surface at small boat landing	652
8.0	Mouth of Big John Creek, water surface	650
8.9	Nail in side of cottonwood tree, Prather's Bridge, 100 feet northwest of river and old bridge	659.02
8.9	Water surface	648
9.9	Bronze tablet marked "728 ATLANTA," middle step, front entrance, James Prather homestead	726.873
10.5	Mouth of stream	646
11.5	Nail in root of apple tree, 600 feet west of river	657.40
11.5	Water surface	644
13.0	Mouth of stream	642
13.0	Nail in root of gum tree, 10 feet west of river	658.51
13.8	Nail in root of gum tree, west edge of river	651.33
13.8	Mouth of Toccoa Creek, water surface	641
13.9	Jarrett Bridge, water surface	641

Elevations on Tugaloo and Savannah rivers from head of Tugaloo River to Augusta—Continued.

TUGALOO RIVER TO JUNCTION WITH SENECA RIVER—Continued.

Distance	Description of points	Elevation above sea level.
Miles		*Feet.*
15.4	Nail in root of water-oak tree 4 feet east of river	642.50
15.4	Nail in root of walnut tree, 50 feet west of railroad bridge	660.52
15.4	Bronze tablet marked "666 ATLANTA," west abutment of railroad bridge crossing river	665.467
16.0	Mouth of stream, water surface	639
16.4	Mouth of stream, water surface	639
16.5	Nail in root of sycamore tree, 50 feet south of river	641.09
16.5	Mouth of stream	637
17.5	Nail in root of birch tree, 50 feet east of river	646.91
18.0	Water surface	636
18.0	Nail in root of walnut tree, 100 feet west of river, 200 feet east of county road	646.60
19.0	Mouth of stream opposite sawmill, water surface	632
19.1	Nail in root of walnut tree	647.65
20.1	Mouth of stream, water surface	630
21.3	Nail in top of swamp-bush, 3 feet northwest of river	634.60
21.7	Nail in root of walnut tree, 10 feet south of Rock Creek	640.35
21.7	Water surface	624
22.0	Nail in root of walnut tree, 400 feet northwest of Jenkins Ferry, 200 feet west of river	638.10
22.0	Bronze tablet marked "732 ATLANTA," in chimney 2 feet above ground, north side of house, W. J. Perkins's homestead (the above is on a single spur line)	730.754
22.0	Water surface	624
22.0	High water	638.00
22.3	Mouth of stream, water surface	622
22.4	Nail in stump, walnut tree	635.56
22.6	Nail in root of walnut tree, 40 feet west of river	634.32
23.2	Nail in root of birch tree on edge of small stream	629.55
24.5	Nail in root of small tree, 4 feet west of river	619.47
24.5	Water surface	618
25.1	Water surface	616
25.5	Nail in root of pine tree, 50 feet west of river	625.12
25.7	Water surface	614
26.1	Nail in old stump, 41 feet west of river	615.42
26.3	Head of Shelors Shoals, water surface	610
27.6	Nail in root of walnut tree, 10 feet north of river	614.54
27.6	Water surface	607
27.9	Water surface	605
28.1	Mouth of large creek, water surface	604
29.1	Nail in top of pine tree, 5 feet northeast of river	623.27
29.3	Nail in root of water-oak tree, Shelors Ferry, 10 feet northeast of river	606.46
29.3	Water surface	600
29.3	Bronze tablet marked "630 ATLANTA" in large rock, 100 feet northwest of I. E. Martin's house, 10 feet north of road, 0.3 mile southwest of Shelors Ferry	628.875
30.1	Mouth of stream, water surface	599
30.3	Nail in root of sycamore tree, 10 feet north of river	601.17
30.3	Mouth of stream, near bend in river, water surface	597
30.4	Nail in root of water-oak stump, 10 feet north of river	598.10
30.4	Water surface	595
31.8	Mouth of Gumlog Creek, water surface	592
32.3	Nail in root of apple tree, near middle branch	597.79
32.4	Water surface	590
33.1	Water surface	588
33.6	Nail in root of maple tree in fork of road, 100 feet west of Knox Bridge	602.73
33.6	Water surface	588
33.6	Bronze tablet marked "613 ATLANTA," in chimney, S. A. Glenn's house, 200 feet west of Knox Bridge	612.241
34.3	Water surface	587
34.3	Nail in top of dead stump, 25 feet northwest of Shoal Creek	598.34
35.2	Mouth of Shoal Creek, water surface	586
35.3	Nail in top of pine stump, 200 feet north of river	601.72
35.4	Mouth of Knox Branch, water surface	586
36.1	Nail in root of oak tree, 900 feet north of river	591.83
36.5	Mouth of Burton Branch, water surface	582
37.5	South side of river, point on bottom of cliff	588.07
37.8	Nail in root of red-oak tree 10 feet north of road, 250 feet south of Pullins Ferry	596.59
37.8	Pullins Ferry, water surface	581

Elevations on Tugaloo and Savannah rivers from head of Tugaloo River to Augusta—Continued.

TUGALOO RIVER TO JUNCTION WITH SENECA RIVER—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
38.4	Head of Cleveland Shoals, water surface	578
39.6	Nail in root of sycamore tree, 10 feet north of river, Avery's Ferry	584.36
39.6	Foot of shoals, water surface	578
39.8	Point on rock, bottom of cliff, 2 feet south of river	581.95
39.8	Bronze tablet marked "588 ATLANTA" in rock, top of cliff, Avery's Ferry, 20 feet south of river	587.443
40.3	Nail in root of walnut tree, 100 feet south of river, Bradberrys Ferry	581.95
40.3	Head of Chandlers Shoals, water surface	575
40.7	Point on rock, bottom of cliff, 1 foot south of river	577.26
40.8	Nail in root of beech tree, 1 foot south of river	572.24
40.8	Water surface	570
40.9	Mouth of Reed Creek, water surface	564
41.1	Foot of Chandlers Shoals, water surface	562
41.4	Nail in stump, 900 feet east of Reed Creek, 10 feet south of river	566.95
41.7	Nail in root of birch tree at boat landing	563.72
42.3	Head of Hatten Shoals, water surface	560
42.8	Nail in root of maple tree, 1,000 feet south of F. Clark's house, north edge of river.	556.79
42.8	Water surface	555
43.3	Nail in root of beech tree, 25 feet east of Beaverdam Creek	554.01
43.3	Water surface	546
43.7	Nail in root of large pine tree, 5 feet north of river, 25 feet east of small stream	537.07
43.7	Water surface	535
44.2	Point on rock, bottom of cliff, Hatten Ford	526.91
44.2	Water surface	525
44.5	Mouth of branch, water surface	522
44.7	do	519
45.3	Nail in root of water-oak tree, 30 feet northeast of river	529.36
46.3	Nail in root of beech tree, 15 feet east of river	525.17
46.3	Water surface	519
46.6	Nail in top of burnt stump, 40 feet east of river	524.70
46.6	Water surface	518
47.7	Nail in root of twin beech tree, 15 feet north of river, ¼ mile north of Andersonville, S C	522.27
47.8	Mouth of Branch, water surface	516
48.2	Foot of rapids, water surface	511
48.2	Bronze tablet marked "538 ATLANTA," in rock, east side of road, 200 feet east of river, northwest of Little Beaverdam Creek, Andersonville, S. C	537.519
48.2	"Brouris" Ferry, water surface	510
48.2	Point on rock, 20 feet west of river	514.45

SAVANNAH RIVER FROM JUNCTION OF SENECA AND TUGALOO RIVERS TO BROAD RIVER.

48.7	Mouth of Seneca River, water surface	505
48.7	Nail in root of small pine tree	512.60
49.3	Mouth of branch, water surface	501
49.3	Nail in root of sycamore tree, on edge of bank branch and river	502.78
50.5	Mouth of creek, water surface	497
50.7	Nail in top of willow stump, 50 feet west of river, opposite island	503.38
50.7	Mouth of branch	493
51.4	Nail in root of large red-oak tree in footpath, 10 feet west of river	499.76
51.4	Triple water-oak tree, at Lightwood Creek, 400 feet west of river	507.28
52.3	Carters Ferry, water surface	492
52.3	High water	516
52.3	Mouth of Lightwood Creek, water surface	491
52.8	Nail in root of large walnut tree, 60 feet west of river	501.09
53.3	Nail in root of double water-oak tree, 40 feet west of Browns Ferry	497.79
53.3	Water surface	488
53.3	High water	499
53.3	Bronze tablet marked "518 ATLANTA," in brick and stone abutment at rear of O. C. Brown's house, northwest corner, 1,200 feet northeast of Browns Ferry	516.891
54.6	Mouth of Powderbag Creek, water surface	487
54.5	Nail in root of box-elder tree, 520 feet south of creek, 30 feet west of river	491.88
55.0	Dooleys Ferry, nail in root of poplar tree, 114 feet west of river	492.64

Elevations on Tugaloo and Savannah rivers from head of Tugaloo River to Augusta—Continued.

SAVANNAH RIVER FROM JUNCTION OF SENECA AND TUGALOO RIVERS TO BROAD RIVER.
Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
55.0	Dooleys Ferry, water surface	486
55.7	Nail in root of maple tree hanging over edge of river, opposite Crafts island	485.13
55.7	Water surface	485
55.7	Mouth of Long Branch, head of McDaniel Shoals, water surface	484
56.1	Nail in root of large poplar tree, 30 feet south of river	487.61
56.1	Water surface	482
56.1	High-water mark	487
56.8	Nail in root of pine tree, 70 feet southwest of river	483.26
56.8	Water surface	474
57.3	Nail in root of birch tree, mouth of Turner Creek, southwest of river	473.43
57.3	Water surface	471
57.5	Nail in root of birch tree, 20 feet southwest of river	476.13
57.5	Water surface	470
58.0	Nail in root of red-oak tree bending over edge of river 0.1 mile west of Harpers Island	472.57
58.7	Foot of McDaniel shoals, water surface	466
59.1	Bronze tablet marked "495 ATLANTA," in cliff foot of steep hill, west side of ferry road, opposite colored house, 0.2 mile above Parks Ferry	494.435
59.3	Parks Ferry, nail in root of large red-oak tree, 15 feet west of river	468.53
59.3	Parks Ferry, water surface	461
59.5	Water surface	460
60.5	Nail in root of mulberry tree stump, west side of river	462.42
60.5	Water surface	458
60.8	Sadd ers Old Ferry, point on rock, rock cliff, 40 feet west of river	466.598
60.8	Saddlers Old Ferry, water surface	458
60.9	Nail in root of hickory tree, 60 feet south of river	471.27
60.9	Water surface	457
61.5	Nail in root of large black-oak tree, 500 feet north of river at Cedar Creek	460.66
61.5	Mouth of Cedar Creek	455
62.3	Nail in root of white-ash tree, 10 feet west of river, 0.1 mile southwest of Kinleys Ferry	457.68
62.3	Water surface	454
62.4	Head of Turner's Shoals, water surface	453
62.5	Mouth of McMullins Branch, water surface	450
64.2	Nail in root of small hickory tree, 50 feet south of river	456.55
64.3	Shoals, water surface	450
65.8	Nail in root of black oak tree, 200 feet west of river	459.62
65.9	Water surface	443
66.2	Nail in root of black-oak tree, 25 feet west of river	445.80
66.2	Water surface	440
66.9	Nail in root of red-oak tree, Crafts Ferry, 10 feet west of river	443.67
66.9	Mouth of creek, water surface	437
66.9	Aluminum tablet marked "450 ATLANTA," in rock, 60 feet west of river, 125 feet west of boat landing, Crafts Ferry	449.306
66.9	Foot of Turners Shoals, water surface	437
68.1	Head of Middleton Shoals, water surface	435
68.5	Nail in root of small black-oak tree, 125 feet west of river, opposite Barnes Island	443.11
68.5	Water surface	431
68.7	Nail in root of dogwood tree on top of cliff, 300 feet west of river	457.46
69.5	Nail in root of willow stump, west edge of river	428.03
69.8	Foot of Middleton Shoals, water surface	424
69.8	Nail in root of post-oak tree, 20 feet west of river	432.50
70.2	Nail in root of water-oak tree, 20 feet west of river, Powells Ferry	435.23
70.2	Powells Ferry, water surface	422
70.9	Water surface	419
71.0	Nail in top of white ash stob, 150 feet west of river, 0.8 mile south of Powells Ferry	439.30
71.3	Head of Greggs Shoals, water surface	418.7
72.4	Black Ferry, nail in root of birch tree, 25 feet west of river	421.677
72.4	Black Ferry, water surface	410.3
72.8	Nail in root of octagon burnt tree stump, 350 feet east of river	431.08
73.2	Mouth of creek, water surface	409
73.4	Nail in root of persimmon-tree stump, 350 feet east of river	419.39
73.7	Mouth of branch, water surface	407
73.7	Opposite mill, water surface	406
73.8	Mouth of Clearwater Creek, water surface	406

Elevations on Tugaloo and Savannah rivers from head of Tugaloo River to Augusta—Continued.

SAVANNAH RIVER FROM JUNCTION OF SENECA AND TUGALOO RIVERS TO BROAD RIVER. Continued.

Distance	Description of points.	Elevation above sea level.
Miles		*Feet.*
74.3	Nail in root of persimmon tree, 140 feet southwest of small branch, 350 feet east of river	414.39
75.8	South of Allens Creek, water surface	404
76.2	Harpers Ferry, nail in root of water-oak tree, south side of road, 20 ft. east of river	412.26
76.2	Harpers Ferry, water surface	403
76.2	High-water mark	416
76.4	Bronze tablet marked "420 ATLANTA," in limestone rock side of brook, 250 feet southwest of W. J. Taylor house	419.146
77.0	Mouth of branch, water surface	402
77.3	Ruckers and Tuckers Ferry, nail in side of willow tree, 40 feet southeast of and 5 feet west of river	405.49
77.3	Ruckers and Tuckers Ferry, water surface	401
77.3	High-water mark	418
77.6	Water surface	400
78.1	Water surface	399
78.4	Nail in root of white-hickory stump, 50 feet north of river, 60 feet west of English Creek	417.13
78.4	Mouth of English Creek, water surface	398
78.9	Water surface 900 feet south of head of McCauleys Island	397
79.2	McCauleys Ferry, nail in root of ash stump, 40 feet west of river	407.19
79.2	McCauleys Ferry, water surface	397
79.6	Nail in root of beech tree, 150 feet north of river	407.39
79.6	Water surface	396
80.5	Mouth of branch	396
80.8	Nail in root of walnut tree, 50 feet east of river	398.77
81.0	Moseleys Ferry, nail in root of walnut tree, 50 feet east of river	400
81.0	Moseleys Ferry, water surface	392
81.3	Water surface	392
81.6	Water surface	391
81.7	Head of large falls, water surface	390
81.8	Nail in root of twin pine tree, 50 feet east of river	399.23
81.9	Cherokee Shoals, water surface	388
82.6	Water surface	379
82.6	Nail in root of oak tree, 125 feet east of river	385.75
83.2	Water surface	374
83.3	Nail in root of white-oak tree, 40 feet west of river, Carters Island, ferry	382.52
83.5	Water surface	373
83.7	Mouth of Rocky River, water surface	372
84.2	Water surface	371
84.2	Bronze tablet marked "383 ATLANTA," abutment, Seaboard Air Line bridge, east side of bridge	382.161
85.1	Nail in root of oak tree, 15 feet north of river, lower end of Watkins Island	375.70
85.2	Nail in side of dead stump, on mainland, 150 feet southwest of Watkins Island	374.59
85.2	Head of Trotters Shoals, water surface	367
85.5	Shoals, water surface	364
85.7	Head of island, water surface	362
85.9	Water surface	358
86.0	Nail in stob 75 feet west of river	367.40
86.2	End of Calhoun's Island, water surface	356
86.3	Nail in root of black-ash tree, 60 feet southwest of river	365.01
86.3	Trotter Shoals, water surface	353
86.6	Water surface	351
86.6	Point on rock, bottom of cliff	354.27
87.1	Nail in root of triple cedar tree, 75 feet west of river, Calhoun's Ferry	348.39
87.1	Water surface	340
87.5	Water surface	336
87.6	Nail in root of pine tree in path, 50 feet southwest of river	341.32
88.1	Mouth of creek, water surface	329.7
88.3	Water surface	328
88.6	Nail in root of Spanish oak, 400 feet west of river, 10 feet southeast of road	338.61
88.9	Water surface	325
89.2	Nail in root of hickory tree in footpath, on top of steep hill, 200 feet west of river	360.67
89.2	Water surface	322
89.4	Water surface	318

Elevations on Tugaloo and Savannah rivers from head of Tugaloo River to Augusta—Continued.

SAVANNAH RIVER FROM JUNCTION OF SENECA AND TUGALOO RIVERS TO BROAD RIVER. Continued.

Distance	Description of points	Elevation above sea leve
Miles		*Feet*
89.7	Bronze tablet marked "320 ATLANTA," in large rock, 50 feet west of river, 2.5 miles southeast of Calhoun's Ferry	319.252
89.7	Water surface	313
90.1	Water surface	308
90.2	Water surface	304
90.3	Nail in root of water-oak, 300 feet north of old mill, 10 feet west of river	305.90
90.3	Water surface	301
90.4	Water surface	299
91.3	Mouth of branch, water surface	292
91.3	Nail in root of dead birch tree, 10 feet west of river	300.21
91.8	Water surface	291
92.3	Creek	289
92.8	Clarks Ferry, copper tack in root of water oak, 200 feet west of river	309.13
92.8	Clarks Ferry	287
92.8	High-water mark	307
93.7	1,500 feet below creek, water surface	285
93.9	Copper tack in side of gum tree, 50 feet west of river	299.66
94.2	Water surface	284
96.1	Nail in root of dead black gum, east side of road, Petersburg Ferry	293.41
96.1	Mouth of Broad River	281
96.2	Nail in root of water oak, south side of ferry road	295.77
96.4	Bronze tablet marked "328 ATLANTA," in brick wall of R. L. Cade's store, Lisbon	327.850

SAVANNAH RIVER (FROM BROAD RIVER TO AUGUSTA).

96.8	Water surface	279
97.6	Hesters Ferry, 6-inch willow	296.20
97.6	Hesters Ferry, water surface	277
98.4	Water surface	276
99.3	Twelve-inch pine opposite Goat Island	303
99.3	Water surface	276
99.8	Water surface	275
101.1	Water surface	274
102.1	Mouth of branch, water surface	273
102.8	Water surface	272
103.6	Water surface	271
103.6	Six-inch willow at Rimsons Ferry	280.59
104.3	Opposite Murray Island, water surface	270
105.4	Water surface	269
105.8	Water surface	267
106.4	Water surface	267
106.4	Twelve-inch birch, at Barksdales Ferry	281.07
107.1	Water surface	266
108.1	Ten-inch willow, near branch	276.51
108.1	Water surface	264
108.6	Water surface	264
109.1	Water surface	263
109.6	Mouth of small branch	263
110.8	Mouth of small branch	261
112.1	Water surface	258
112.1	Eight-inch cotton tree at Dog Ferry, mouth of Little River (of South Carolina)	269
113.1	Mouth of Hawes Creek	255
114.3	Thirty-inch cotton tree at Ferguson Ferry	262.16
114.3	Water surface	252
115.1	Head of Point Lookout Shoals	250
115.3	Foot of Point Lookout Shoals	248
115.8	Water surface	247
116.6	Mouth of Landram Creek	245
117.3	Water surface	245
117.6	Twenty-four-inch pine, 50 feet from river, near a rocky hill	252.12
117.6	Water surface	239
118.4	Water surface	235
118.8	Water surface	234
119.3	Mouth of Jordan Creek	231

Elevations on Tugaloo and Savannah rivers from head of Tugaloo River to Augusta—Continued.

SAVANNAH RIVER (FROM BROAD RIVER TO AUGUSTA)—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
120.1	Mouth of small branch	220
121.1	Prices Ferry, 30-inch cotton tree	221.12
121.1	Prices Ferry, water surface	212
122.1	Water surface	210
122.8	Water surface	206
123.4	Kilcrease Ferry, foot of Long Shoals, 24-inch cotton tree	209.76
123.4	Kilcrease Ferry, water surface	208
123.8	Water surface	199
124.1	Eighteen-inch cotton tree above old channel way	205.06
124.8	Mouth of Owl Branch, water surface	197
125.8	Head of Little River Shoals, water surface	193
126.3	Foot of Little River Shoals, water surface	189
126.3	Six-inch willow, mouth of Little River of Georgia	191.87
126.4	Mouth of Keg Creek, water surface	188
127.1	Bench mark on 8-inch gum below ditch	201.84
127.6	Head of Scotts Shoals, water surface	186
128.6	Foot of Scotts Shoals, water surface	180
129.6	Lukes Ferry, water surface	178
131.1	Bench mark on 8-inch crooked willow	189.72
131.1	Water surface	178
131.8	Water surface	178
132.4	Mouth of Big Kiokee Creek, water surface	177
133.4	Mouth of Little Kiokee Creek, water surface	176
134.4	Harveys Falls water surface	174
135.0	Water surface	173
135.6	Woodlawn, bench mark on beam over last pier of bridge	199.15
135.6	Woodlawn, water surface	171
136.6	Furys Ferry, on 6-inch pine	188.80
137.6	Head of Pine Log Shoals, water surface	168
137.8	Foot of Pine Log Shoals, water surface	165
138.6	Water surface	164
139.4	Water surface	162
140.4	Above branch, 10-inch sycamore	171.08
140.4	Water surface	158
141.6	Ten-inch willow, mouth of Stevens Creek	162.78
141.6	Water surface	155
142.8	Above dam, water surface	152
142.8	Below dam, water surface	142
142.8	Headwater in canal below locks	151
142.8	Bench mark at locks, top of masonry	164.04
143.4	Water surface at waste gate	137
143.8	Water surface	135
144.4	Water surface	135
144.6	Headwater in canal	150
144.8	Bench mark on 10-inch pine near canal bank	155.52
145.1	Headwater in canal	150
145.4	Water surface at waste gate	127
146.1	Water surface	122
146.4	Headwater in canal at city pumping station	150
147.1	Water surface	118
147.6	Warwick Manufacturing Co. tailrace and wastewier, water surface	112
148.4	J. P. King, tailrace, water surface	111
149.1	Hawks Gully, water surface	109
149.1	Bench mark marble slab, corner Fifteenth and Broad streets	135.84
149.1	Zero of gage at Center street, Augusta, Ga	98.17

SURVEY OF CHATTOOGA RIVER.

The elevations in the following list are based on an aluminum tablet, marked "1050 M. C.," at the Washington street entrance to the State capitol at Atlanta, the elevation of which is accepted as 1,049.546 feet above mean sea level. The initial point upon which these levels depend is a bench mark of primary levels of the Tugaloo and Savannah River survey at the mouth of Chattooga River. The elevations accord with the 1903 adjustment.

The leveling was done for the U. S. Geological Survey in 1903 by Thomas B. O'Hagan, levelman, under the direction of Carroll Caldwell, field assistant.

Elevations on Chattooga River from mouth of Chattooga River to Russell Bridge, Georgia. [a]

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Tallulah and Chattooga rivers, 100 feet north of junction, point on rock	761.29
0.0	Tallulah and Chattooga rivers, white-oak tree 75 feet west of junction of, 25 feet north of Tallulah River, nail in root of oak tree	762.21
0.0	Tallulah and Chattooga rivers, water surface	754
0.2	Water surface	759
0.7	Mouth of stream, water surface	763
1.0	Worse Creek, mouth of, water surface	765
1.2	Water surface	766
1.9	Small stream on north edge of river, Spanish oak, nail in root of	776.27
1.9	Water surface	772
2.1	Water surface	775
2.6	North side of river, point on rock	788.63
3.0	Water surface	779
4.0	East side of river, point on rock	851.51
4.0	Water surface	849
4.1	Water surface	869
4.5	Mouth of creek, water surface	892
4.7	Water surface	899
4.9	East side of river, point on rock	918.27
4.9	Water surface	919
5.0	Water surface	929
5.1	Water surface	939
5.2	Water surface	949
5.3	Mouth of stream, head of shoals, water surface	954
5.6	Camp Creek, mouth of, water surface	961
5.6	Trail Ford, point on rock 20 feet east of river	967.50
5.6	Trail Ford, water surface	962
5.8	Water surface	969
6.1	Water surface	979
6.3	Water surface	989
6.7	Water surface	999
7.0	Water surface	1,000
7.2	Water surface	1,029
7.4	Cliff Creek, mouth of, water surface	1,035
7.4	Cliff Creek, 300 feet above, east side river, point on rock	1,045.26
7.5	Water surface	1,039
7.6	Chechero Creek, mouth of, water surface	1,049
7.8	Water surface	1,059
8.0	Water surface	1,069
8.2	Water surface	1,079
8.4	Water surface	1,089
8.5	Water surface	1,099
8.6	Water surface	1,109
9.0	Water surface	1,119
9.5	Water surface	1,129
9.8	Water surface	1,149
10.0	East side of river on edge of bank, point on rock	1,152.43
10.0	Water surface	1,159
10.0	Iron bridge, South Carolina side, iron bar under bridge, point on	1,168.95
10.0	Iron bridge, water surface	1,166.3
10.0	High water	1,177
10.5	Water surface	1,169
10.6	Mouth of creek, water surface	1,173

[a] Seven miles north of Russell, S. C.

Elevations on Chattooga River from mouth of Chattooga River to Russell Bridge, Georgia—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet.*
10.6	Head of falls, water surface	1,179
10.8	Mouth of stream, water surface	1,188
11.0	Water surface	1,189
11.4	Water surface	1,199
11.7	Mouth of stream, water surface	1,204
12.0	Water surface	1,209
12.5	50 feet south of island, east side of river, 10 feet from bank, point on rock	1,217.96
12.7	Water surface	1,219
12.9	Water surface	1,223
13.0	Water surface	1,229
13.2	Mouth of stream, water surface	1,232
13.6	Water surface	1,239
13.8	South Carolina side of river, at large cliff, point on rock	1,245.53
14.0	Water surface	1,249
14.0	Mouth of Fall Creek, water surface	1,262
14.5	Water surface	1,268
14.7	Water surface	1,279
15.0	Water surface	1,289
15.7	Water surface	1,296
16.0	Water surface	1,299
16.6	Rich Creek, mouth of, water surface	1,308
16.8	Water surface	1,309
16.9	South Carolina side of river, point on rock	1,310.4
17.0	Water surface	1,319
17.4	Water surface	1,329
17.8	Sandy bottom, 1,000 feet below, east side of river, point on rock	1,332
18.0	Water surface	1,340
18.7	Water surface	1,359
18.7	East side of river, point on rock	1,366.45
18.9	Water surface	1,360
19.1	300 feet below falls, at bend in river, point on rock	1,376.19
19.2	Foot of falls, surface of water	1,375
19.0	Head of falls, water surface	1,381
19.7	Water surface	1,399
19.8	Rock Creek, mouth of, water surface	1,406
20.0	Sand ford, water surface	1,411
20.0	Sand ford, 75 feet north of, 15 feet east of river, nail in root of white oak tree	1,416.55
20.2	Water surface	1,419
20.6	Water surface	1,429
20.7	Dick Creek, mouth of, water surface	1,439
20.8	Water surface	1,449
21.0	East side of river, point on rock	1,452.91
21.2	Water surface	1,459
22.0	Water surface	1,469
22.1	Water surface	1,473
22.3	4 feet east of river, nail in root of pine tree	1,481.86
22.7	Water surface	1,479
23.0	Earl Ford, 100 feet below ford, east side of river, point on rock	1,486.74
23.0	Earl Ford, water surface	1,486
23.0	Warwoman Creek, mouth of, water surface	1,486
23.8	South side of river point on rock	1,494.13
23.8	Water surface	1,492
24.8	Water surface	1,499
25.2	West side of river, point on rock	1,510.51
25.2	Water surface	1,505
26.0	Horseback Ford, water surface	1,518
26.3	Water surface	1,519
26.4	Ford, 65 feet above, north side of river, nail in live stub (white oak tree)	1,522.66
26.4	Water surface	1,521
26.8	Water surface	1,529
27.1	Water surface	1,339
27.9	Barlow stream, center of river, point on rock	1,547.26
28.0	Water surface	1,549
28.7	Long Bottom Ford, east side, nail in fork of sugar-maple tree	1,557.68
29.7	Small stream, mouth of river at, water surface	1,554
30.6	West fork, mouth of, water surface	1,563
30.6	Wooden bridge above Russell, S. C., southwest side of bridge, point on bolt	1,584.84
30.6	Bridge, water surface	1,564

SURVEY OF BROAD RIVER.

The elevations in the following list are based on a bronze tablet in a brick wall of R. L. Cade's store at Lisbon, Ga., marked "ATLANTA 328," the elevation of which is accepted as 327.850 feet above mean sea level in accord with the 1903 adjustment of the precise level net.

The leveling was done in 1903 for the United States Geological Survey by Thomas B. O'Hagan, levelman, under the direction of Carroll Caldwell, field assistant.

Elevations on Broad River from mouth to Harrison Bridge, near Carnesville.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Lisbon, mouth of Broad River, 870 feet northwest of, south side of ferry road, nail in twin water oak	295.77
0.0	Broad River, mouth, water surface	280
0.0	Broad River, 870 feet northwest of mouth, high-water bench mark	300
0.6	Small stream near, water surface	281
1.4	Mill Ford Shoals, foot of, water surface	281
2.1	Mill Ford Shoals, middle of, water surface	288
2.4	Mill Ford Shoals, head of, water surface	289
2.4	Mill Ford Shoals, 200 feet east of river near 5-inch elm tree, nail in line stob	304.9
2.7	Center of bend, water surface	291
3.4	J. De Bose Ferry, 300 feet above, water surface	292
4.7	Anthony Shoals, foot of, water surface	298
5.0	Anthony Shoals, water surface	295
5.2	Anthony Shoals, at large bend in river, surface of water	307
5.2	Anthony Shoals, at rock cliff, water surface	310
5.2	Anthony Shoals, at rock cliff, point on rock 1 foot west of river	311.57
5.4	Anthony Shoals, water surface	319
5.6	Anthony Shoals, water surface	329
5.8	Anthony Shoals, in front of factory, water surface	339
6.0	Anthony Shoals, at dam, east edge of river, nail in root of birch tree	347.77
6.0	Anthony Shoals, at dam, water surface	351
6.4	Anthony Shoals, head of, water surface	355
6.5	Burton Ferry, 6 feet south of river, nail in root of Spanish-oak tree	361.44
6.5	Burton Ferry, water surface	355
6.5	Burton Ferry, high water	364
7.1	Water surface	355
8.7	Mouth of creek, water surface	356
8.7	60 feet south of river, 25 feet east of creek, nail in sweet-gum tree	367.59
10.0	Water surface	356
10.9	Bakers Ferry, small shoals, water surface	356
11.0	Bakers Ferry, 20 feet southwest of river, nail in root of large birch tree	364
11.0	Bakers Ferry, water surface	357
11.8	Wahache Creek, mouth of, water surface	360
13.8	Bells Bridge, north side, nail in joist	375.69
13.8	Bells Bridge, water surface	360
13.8	Bells Bridge, high water	386
13.8	Bells Bridge, floor of	393.2
15.0	Bells Bridge, 250 feet north of river, large pine tree near path to river, nail in tree	375.34
15.4	Mouth of small stream, water surface	361
15.6	Falling creek, mouth of, water surface	362
16.0	Foot of shoals, water surface	363
16.4	Fish dam, foot of, water surface	365
16.4	Fish dam, head of, water surface	368
16.4	Fish Dam Ferry, north side of river, nail in root of large water-oak tree	374.85
16.4	Fish Dam Ferry, south side of, nail in root of gum tree	374.87
16.4	Fish Dam Ferry, water surface	368
17.7	Water surface	368
18.9	North of river, point on rock	386.66
18.9	Water surface	370
20.0	Grimes Old Ferry, edge of river, nail in root of white-oak tree	375.51
20.0	Grimes Old Ferry, water surface	371
21.3	500 feet south of river, 25 feet south of river road, nail in root of Spanish oak	328.89
22.1	Mouth of large creek, water surface	372.8
22.5	Pine grove, 400 feet north of river, 900 feet west of large creek, nail in root of pine tree	398.51
23.1	Mattox Bridge, north side, nail in plank	401.35
23.1	Mattox Bridge, floor	404
23.1	Mattox Bridge, water surface,	374
23.1	Mattox Bridge, high water	400
24.8	Rock cliff, near, 40 feet south of river, nail in root of gum tree	397.88
24.8	Water surface	377

Elevations on Broad River from mouth to Harrison Bridge, near Carnesville—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
25.2	Jones Ferry, east side, nail in root of water-oak tree	393.43
25.2	Jones Ferry, water surface	377
25.2	Jones Ferry, high-water mark	401
25.5	Jones Ferry, 0.3 mile above, 40 feet west of river, nail in white oak tree	394.38
26.0	Surface of water	380
26.7	Millstone Creek, mouth of, 60 ft. east of, 25 ft. south of river, nail in side of elder	392.64
26.7	Millstone Creek, water surface	381
28.0	Gold Mine Cliff, water surface	384
28.5	Horseshoe bend, head of, 150 feet south of river, in cornfield, nail in Spanish oak	405.67
28.5	Dove Creek, mouth of, water surface	386
28.6	Bend in river, water surface	396.4
28.6	Water surface	386
30.0	260 feet north of river, nail in root of pine tree	411.3
30.9	Water surface	391
31.0	Martin Old Ferry, near spring, point on rock	420.14
31.3	Junction South Fork and Broad River, southwest point of rivers, nail inside of birch tree	395.86
31.3	Water surface	391
32.4	Detweiler Ferry, foot of shoals, water surface	395
32.9	Detweiler Ferry, east side, edge of water, slanting Spanish oak, nail in	406.07
32.9	Detweiler Ferry, head of shoals, water surface	402.1
32.9	Detweiler Ferry, high water	423.6
33.4	Seaboard Air Line bridge, abutment, east side of river, 350 feet from	420.28
33.4	Seaboard Air Line bridge, water surface	402
34.0	Moores Shoals, water surface	404
34.4	Old Mill, 25 feet east of river, point on rock	416.23
34.4	Old Mill, mouth of stream, water surface	409
34.4	Moores Shoals, head of, water surface	411
34.7	Bells Ferry, edge of river, 2 feet from road overhanging Spanish oak	418.87
34.7	Bells Ferry, water surface	412.3
34.7	Bells Ferry, high water	430
35.9	Harpers Ferry, north side of river, east side ferry, nail in root of black-gum tree	422.54
35.9	Harpers Ferry, water surface	414
35.9	Harpers Ferry, high water	432
36.8	Holly Branch, mouth of, water surface	416
37.5	Moons Ferry, east of ferry, nail in side of white-oak tree	423.19
37.5	Moons Ferry, water surface	418
37.8	Water surface	419
37.9	Mouth of creek, water surface	420
38.6	Payton Shoals, foot of, water surface	422
39.0	Payton Shoals, east side of river, nail in sycamore tree	428.57
39.0	Payton Shoals, head of, water surface	425
39.0	South Payton Ferry, 25 feet from river, east side of ferry, nail in side of dead willow tree	431.35
39.1	Payton Ferry, water surface	427
39.1	Payton Ferry, high-water	449
39.4	Payton Ferry, No. 2, head of shoals, water surface	429
39.8	Victory Ferry, overhanging birch tree, nail in side of	432.17
39.8	Victory Ferry, water surface	430
39.8	Victory Ferry, high-water	450
40.4	Moons Ferry, nail in root of white-oak tree	442.62
40.4	Moons Ferry, foot of shoals, water surface	431
40.5	Moons Shoals, head of, water surface	433
41.1	Bend in river, 1,500 feet east of Mill Creek, east side of river, point on rock	443.14
41.1	Water surface	438
41.4	Mill Shoal Creek, mouth of, water surface	439
41.4	Water surface	441
42.2	Head of shoals, water surface	450
42.7	Moores Ferry, west side of, large spruce tree, nail	455.77
42.7	Moores Ferry, water surface	450
42.7	Moores Ferry, high-water mark	460
43.0	Moores Shoals, at spring, foot of shoal, surface of water	454
43.3	Shoals, water surface	462
43.3	Moores Shoals, point on rock	470
43.8	Browns Ferry, burnt stump northeast of river, nail in	482.09
43.8	Browns Ferry, near head of Moores Shoals, water surface	471
44.2	Moores Shoals, head of, water surface	482
44.6	Dudleys Shoal, east bank of river, point on rock	489.28
44.6	Dudleys Shoal, water surface	482
45.5	Dudley Ferry, black-gum tree, north side of ferry, nail in root	502
45.5	Dudley Ferry, water surface	487
45.5	Dudley Ferry, high-water mark	504
45.6	Bryant Shoals, foot of, water surface	489
46.2	Bryant Shoals, head of, water surface	496
46.5	Sawmill, Spanish-oak tree, 50 feet from river, nail in root of	506.65
46.5	Water surface	502
46.5	Head of shoals, water surface	506
47.7	North side of river, 1.2 miles below Blue Creek, point on rock	518.38
47.7	Water surface	512
48.9	Mouth of Blue Creek, water surface	517

Elevations on Broad River from mouth to Harrison Bridge, near Carnesville—Continued.

Distance	Description of points	Elevation above sea level
Miles.		*Feet*
49.6	Water surface	521
50.4	New bridge, east side of river, nail in floor of	546.44
50.4	Bridge floor	548.8
50.4	Water surface	523
50.4	High-water mark	548.1
51.2	Mouth of stream, foot of shoals, water surface	523.7
51.6	Head of shoals, water surface	526
52.3	Winters Creek, just below bend in river, water surface	545
52.4	Winters Creek, mouth of, head of shoals, water surface	529
53.2	Water surface	532
53.9	Mouth of stream, water surface	535
54.7	Braggs Ferry, 2 feet from river, nail in root of large red-oak tree	541.75
54.7	Braggs Ferry, mouth of Hudson River, water surface	537
55.2	Water surface	541
55.7	Dove Bridge, southeast corner of, nail in side of white-oak tree	561.78
55.7	Dove Bridge, water surface	542
55.7	Dove Bridge, high water mark	569,
57.2	Foot of shoals, water surface	548
57.3	Head of shoals, water surface	552,
57.6	Water surface	554
57.7	Creek, 60 feet southeast of mouth of, nail in white oak tree	563.30
57.7	Mouth of creek, water surface	556
58.1	Mouth of stream, water surface	556
58.8	Middle Broad and Broad Rivers, fork of, walnut tree, 75 ft. west of fork, nail in side	575.16
58.8	Water surface	557
59.1	Double bridge, northwest side of, nail in plank	581.11
59.0	Water surface	563
59.1	High-water mark	576
59.1	Bridge floor	584
59.7	Head of shoals, water surface	570
59.9	Water surface	573
60.6	Corey Creek, 6 miles below, large rock projecting out from bank, point on	581.02
60.9	Small shoal in river	580
60.9	Corey Creek, mouth of	581
61.5	Bend on east side of river, point on rock	591.15
61.5	Water surface	584
62.1	Fish dam, water surface	586
62.2	Water surface	588
62.3	Bend in river, east side, point on rock cliff	598.59
62.8	Philip Shoal, head of	591
63.2	Stevens Creek, mouth of	592
63.4	Ford, oak tree, 75 feet north of, nail in north side of	603.49
63.4	Water surface	593
63.4	Water surface	594
64.6	Harrisons Bridge, east of, north of river, nail in root of Spanish oak	607.07
64.6	Bridge floor	613.7
64.6	Water surface	596
64.6	High-water mark	612

WATER POWER IN SAVANNAH RIVER DRAINAGE BASIN.

GENERAL STATEMENT.

It is intended that the foregoing lists of water surface elevations along the main river and tributaries above Augusta shall give full and complete data in regard to the total fall and its distribution on these streams:

The record of the hydrographic stations at Augusta, Ga., Calhoun Falls, S. C., and Fort Madison, S. C., on Savannah and Tugaloo Rivers, Carlton on Broad River, and Tallulah Falls on Tallulah River will form a basis for estimating the amount of water flowing at all points.

In the following, attention is called to certain important shoals and proposed grouping of shoals into proposed powers, and mention is made of some of the conditions relative to developing these powers, as well as to powers already utilized.

TALLULAH RIVER.

From the mouth of Popcorn Creek, near the headwaters, down to mouth of Tiger Creek, a distance of 25 miles, the fall is 265 feet, and as can be seen from the list of elevations is almost uniformly distributed, being slightly more than 10 feet to the mile. At a few points in the section the drop is from 5 to 10 feet in a short distance, and good small-power sites are available. In the next 4 miles below Tiger Creek the fall is 55 feet. This reaches the head of the rapids above Tallulah Falls, at which point there is an excellent location for a large storage dam. The fall from here down to the head of Tallulah Falls proper is 110 feet. Somewhere in this section the water should be diverted to a canal if the falls proper should ever be developed into a water power, as by beginning the canal at high enough elevation it can be put on comparatively good ground outside the gorge. A large water power can be developed in this section entirely above the falls proper at a comparatively small expense. Along Tallulah River, beginning at Tallulah Falls, is some of the most picturesque and rugged scenery in the Southern States. In 3½ miles the river drops from 1,414 to 754 feet above sea level, or a distance of 660 feet. The principal falls, in the order they occur, are L'eau D'or 28 feet, Tempesta 76 feet, Hurricane 89 feet, Oceana 41 feet, Bridal Veil 17 feet, all occurring within a distance of less than three-fourths of a mile. The gorge is very difficult and dangerous to climb. On both banks are precipitous cliffs, rising in some places 500 feet shear. The gorge continues to the Tugaloo, except for one stretch about one-half mile long, where it opens up and forms what is known as the Old Valley farm. In the 2½ miles above the

mouth of the river there is a fall of 254 feet, all below the falls proper, which could be used for power without interfering with Tallulah Falls.

WATER POWER ON TUGALOO RIVER.

From the head of Tugaloo River down to the mouth of Panther Creek, a distance of 4½ miles, there are some good shoals, the total fall being 85 feet. The banks are favorable for power development along the entire stretch. From Panther Creek to Averys Ferry, a distance of 35 miles, the slope is too gentle and the valley too wide to utilize the river without flooding considerable farming land. Chandler Shoals, 1¼ miles below Averys Ferry, begin near Bradberry Ferry and have a fall of 10 feet in three-fourths mile. Three-fourths of a mile below are Hatten Shoals, with a fall of 35 feet in 2 miles. These shoals are considered the finest on the river; a 45-foot dam at them would back the water about 4 miles, with very little damage to cultivated land. From this point down to the mouth of Seneca River, which is the head of Savannah River, the fall is 14 feet in a distance of 4 miles.

WATER POWER ON SAVANNAH RIVER.

The fall in Savannah River for the first 7 miles, down to the head of McDaniels Shoals, is 20 feet. At McDaniels Shoals there is a fall of 19 feet in 3 miles. Half a mile above the foot of the shoals, at the head of Harpers Island, is an excellent site for a dam about 700 feet long.

In the 4 miles between this power and the next at Turners Shoals the fall is 12 feet. At Turners Shoals there is a fall of 17 feet in about 4½ miles. These shoals begin at Kenly Ferry and extend to Crafts Ferry. The river widens considerably about a mile below Kenly Ferry. There are several good sites for dams, one being on Crafts Island. The river is wide, however, requiring a dam about 1,000 feet long.

Half a mile below, at Middleton Shoals, there is a fall of 11 feet in 1¾ miles, with an excellent site for a dam at the foot of the shoals. In 1½ miles below, the fall is 5 feet. This reaches the head of Gregg Shoals, where the fall is 8 feet in about a mile. Here the

river runs between steep hills, and a dam would be about 900 feet long.

Half a mile below Moseleys Ferry are the Cherokee Shoals, having 19 feet fall in 2½ miles. This is a very fine power site, as the river runs between steep hills. A dam would have to be 1,000 feet long, and would be placed about a quarter of a mile above the Seaboard Air Line railroad bridge.

One and a quarter miles below the bridge are Trotters Shoals, with a fall of 75 feet in 6 miles. These are considered the finest shoals on the river. They commence at the foot of Watkins Island and extend below Tate's mill to Coffer Creek. In this distance there are numerous rocky bluffs where there are excellent dam sites.

In the next 5 miles, extending to the mouth of Broad River, the fall is 11 feet. From the mouth of Broad River down to Little River, from the South Carolina side, the fall is slight, being 23 feet in the distance of 16 miles. From this point down to the upper end of Long Shoals the fall is 42 feet in 6 miles.

The fall is 23 feet in the next 5 miles, extending to the foot of Scotts Shoals. From here to the Augusta dam the fall is 28 feet in 15 miles.

At Augusta the power is fully developed by a dam about 10 feet high and a canal 7 miles long. The head is about 50 feet. This power belongs to the city of Augusta. It was developed in 1845-1847 and the canal was enlarged in 1872-1875.

WATER POWER ON CHATTOOGA RIVER.

Tallulah River unites with Chattooga River to form the Tugaloo. Chattooga River contains many available undeveloped power sites. From its mouth to Warwoman Creek, a distance of 23 miles, the river flows through a wild, rugged country, being in a gorge almost the entire distance, which results in a very narrow and swift stream. There are numerous dam sites along this distance, the river being almost one continuous shoal, averaging a fall of 32 feet to the mile, and having a fine rock bottom, with rock cliffs on either side. From Warwoman Creek up to Russells Bridge the valley is wide and the fall is much less, being 78 feet in 7 miles.

WATER POWER ON BROAD RIVER.

In the 4¾ miles from the mouth of the river to foot of Anthony Shoals the fall is 13 feet, 8 feet of which occurs in a distance of 1 mile at Millford Shoals.

Anthony Shoals is the finest power site on the river and is one of the best in the State, the fall being 62 feet in a distance of 1¾ miles. Several plans have been proposed for developing the power. Probably the best plan is to build a dam near the upper end of the shoal high enough to raise the water at least 10 feet, and to construct a canal to a point near the foot of the shoals. The proposed raise of 10 feet would back the water 10 miles up the river to the foot of Fish dam, where there is a 3-foot dam, 250 feet long, furnishing power for a gristmill and a sawmill. From Fish dam to the mouth of South Broad River, 15 miles, there is a fall of 23 feet, with no shoal of any consequence. The bottoms are wide in most places and are in a high state of cultivation.

One mile above the mouth of South Broad River are the Detweiler Shoals, with a fall of 7 feet in one-half mile. A mile and a half farther are the Lower Moore Shoals, with a fall of 7 feet in one-third mile, with good outcrops of hard rock on both sides. A dam here would be about 350 feet long.

Five miles farther up the river are Payton Shoals with a fall of 3 feet in one-third mile. In the 4 miles from Payton Shoals to the foot of Moores Shoals the fall is 29 feet. At Moores Shoals there is a fall of 28 feet in 1¼ miles. Above this point there are several shoals with good sites for dams. The fall is 35 feet for the first 5 miles up to the mouth of Blue Creek, and about 5 feet to the mile above this to the end of the survey at Harrison Bridge.

OGEECHEE RIVER DRAINAGE BASIN.

DESCRIPTION OF BASIN.

Ogeechee River is formed by the junction of Williamsons Swamp Creek and Rocky Comfort Creek in Jefferson County, Ga., and drains a small basin in southeastern Georgia lying between the Savannah and Altamaha basins. Ogeechee River runs in a southeasterly direction and empties into the Atlantic Ocean. Its main

tributary is Cannoochee River, which rises in Emanuel County, Ga., and flows southeast, joining the Ogeechee about 20 miles from the Atlantic Ocean. The streams in this basin run through a country that is mostly low. The current is generally good, but the fall available for power is probably small. The bank on one side or the other of the stream is generally low and swampy.

STREAM FLOW.

OGEECHEE RIVER NEAR MILLEN.

This station was established by F. A. Murray at Daniel's toll bridge, 1 mile west of Millen, on June 20, 1903, but was discontinued December 31, 1903, on account of poor conditions for accurate measurement of the flow.

The channel is straight for about 300 feet above and about 500 feet below the bridge. The current is swift in the main channel and sluggish near the banks. The right bank is low and overflows. There is a trestle approach for about 300 feet over low, swampy land on this side of the river. The left bank is lower than the right bank, the swamp extending back from the river about one-fourth mile. The bed of the stream is sandy and shifting. There is but one channel at ordinary stages, but several channels at high water.

Discharge measurements were made from the upstream side of the wooden highway bridge to which the gage is attached. The bridge is at an angle of about 45° to the current. The initial point for soundings is the end of the hand rail at the tollhouse on the left bank, upstream side of the bridge.

The gage is a vertical rod reading from 0 to 12 feet. It is nailed to the upstream post of the third bent from the tollhouse. The gage was read once daily during 1903 by T. J. Lane, the toll keeper.

Bench mark No. 1 is the top of the upstream end of the cap of the first bent from the tollhouse; elevation, 12.00 feet above the zero of the gage. Bench mark No. 2 consists of a notch and nails in the corner of the tollhouse next the river; elevation, 18.00 feet above the zero of the gage.

Discharge measurements of Ogeechee River near Millen in 1903.

Date	Gage height	Discharge	Date	Gage height	Discharge
1903	*Feet*	*Sec.-Ft.*	1903	*Feet*	*Sec.-Ft.*
June 20	5.06	1,548	October 10	2.09	519
July 30	2.35	515	November 20	4.00	889
October 10	2.08	470			

Daily gage height, in feet, of Ogeechee River near Millen.

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903							
1	.....	6.0	2.3	2.4	2.5	2.6	4.0
2	.....	5.7	2.4	2.3	2.4	2.6	3.9
3	.....	5.5	2.7	2.3	2.3	2.7	3.8
4	.....	5.3	3.0	2.3	2.2	2.9	3.8
5	.....	5.3	3.1	2.2	2.1	3.0	3.8
6	.....	5.3	3.4	2.2	2.0	3.2	3.7
7	.....	5.2	3.8	2.1	2.0	3.5	3.7
8	.....	5.0	4.2	2.0	2.0	3.8	3.7
9	.....	5.4	4.1	1.9	2.0	4.0	3.7
10	.....	5.8	3.9	1.9	2.1	4.2	3.7
11	6.5	5.5	3.6	1.8	2.1	4.5	3.7
12	7.1	5.7	3.3	1.7	2.1	4.6	3.8
13	6.9	6.2	3.1	1.5	2.1	4.7	3.8
14	6.7	6.4	3.0	1.6	2.1	4.8	3.8
15	6.6	6.4	3.3	1.9	2.2	4.7	3.9
16	6.5	6.3	3.5	4.1	2.2	4.5	3.9
17	6.2	6.4	3.9	4.9	2.2	4.3	4.0
18	5.9	6.3	4.0	5.5	2.3	4.1	4.0
19	5.5	6.0	4.2	5.6	2.8	4.0	4.0
20	5.2	5.7	4.8	5.4	3.4	4.0	4.0
21	5.0	5.4	5.7	5.1	3.8	4.0	4.0
22	4.8	5.0	6.0	4.9	4.0	4.0	4.1
23	4.8	4.6	5.9	4.8	4.0	4.0	4.2
24	4.9	4.0	5.7	4.7	4.0	4.0	4.3
25	4.8	3.6	5.5	4.5	4.0	4.0	4.4
26	4.6	3.3	5.3	4.1	4.0	4.0	4.5
27	4.7	3.0	5.1	3.5	3.8	4.0	4.7
28	5.1	2.8	4.8	3.0	3.4	4.0	4.9
29	5.5	2.6	4.0	2.7	3.0	4.1	5.1
30	5.8	2.5	3.3	2.6	2.8	4.1	5.3
31	.....	2.3	2.6	.....	2.6	.....	5.5

Rating table for Ogeechee River near Millen from June 11 to December 31, 1903.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.50	418	2.80	595	4.10	933	5.40	1,860
1.60	428	2.90	611	4.20	990	5.50	1,960
1.70	440	3.00	628	4.30	1,030	5.60	2,065
1.80	452	3.10	646	4.40	1,085	5.70	2,170
1.90	465	3.20	665	4.50	1,145	5.80	2,275
2.00	478	3.30	685	4.60	1,210	6.00	2,490
2.10	492	3.40	707	4.70	1,275	6.20	2,710
2.20	506	3.50	731	4.80	1,345	6.40	2,930
2.30	520	3.60	757	4.90	1,420	6.60	3,150
2.40	534	3.70	785	5.00	1,500	6.80	3,370
2.50	549	3.80	816	5.10	1,585	7.00	3,590
2.60	564	3.90	850	5.20	1,675		
2.70	579	4.00	889	5.30	1,765		

Estimated monthly discharge of Ogeechee River near Millen.

Month	Discharge in second-feet		
	Maximum	Minimum	Mean
1908			
June 11-30	3,700	1,210	2,183
July	2,930	520	1,771
August	2,490	520	1,077
September	2,065	418	855
October	889	478	609
November	1,345	564	905
December	1,960	785	989

WILLIAMSONS SWAMP CREEK AT DAVISBORO.

This station was established June 19, 1903, by F. A. Murray, at the Davisboro Bridge, about 200 yards south of the Central of Georgia Railroad station, which is in the middle of the town. It was discontinued on December 31, 1904.

The channel is straight for about 200 feet above and below the station. The right bank is low and overflows at a gage reading of 4 to 4½ feet. The left bank will overflow at a gage height of 3 feet. The bed of the stream is sandy and is slightly shifting. There is but one channel at all stages. The current is somewhat obstructed by the bents which support the bridge at low water and by trees and brush on the banks at high water. Discharge measurements were made from the upstream side of the wooden highway bridge, which is supported by wooden bents about 18 feet apart. The initial point for soundings is the outer edge of the post which supports the end of the hand rail on the left bank upstream side of the bridge. The gage is a vertical rod 10 feet long. It is nailed to the left side of the upstream post of the bent which supports the bridge at a point 302 feet from the initial point for soundings. It was read once each day by A. Baker, a hotel proprietor, who was paid by the Georgia Geological Survey.

Bench mark No. 1 is the top of the bridge floor at the bent 302 feet from the initial point for soundings on the upstream side of the bridge. The point is marked with a cross and the letters "B. M." cut into the top of the bridge-floor plank; elevation, 11.00 feet above the zero of the gage, which is attached to the same bent. Bench

mark No. 2 is the center of a large wire nail driven horizontally into the bridgeward side of an ash tree which stands in the creek near the right bank about 40 feet below the bridge; elevation, 5.50 feet above the zero of the gage.

Discharge measurements of Williamsons Swamp Creek at Davisboro.

Date	Gage height	Discharge	Date	Gage height	Discharge
1903	*Feet.*	*Sec.-ft.*	1903	*Feet*	*Sec.-ft.*
June 19	2.41	83	October 13	1.72	47
July 18	2.58	100	October 13	1.64	41
July 29	1.64	46	November 21	2.58	94
July 29a	1.64	45	December 28	2.69	97

a Wading 50 feet below bridge.

Daily gage height, in feet, of Williamsons Swamp Creek at Davisboro.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903.												
1							2.5	2.1	1.8	1.7	2.1	2.4
2							2.3	4.0	1.9	1.8	2.2	2.5
3							3.3	2.4	1.7	1.8	2.1	2.7
4							3.7	3.5	1.7	1.7	2.4	2.8
5							2.3	3.0	1.7	1.5	4.4	2.4
6							2.3	2.4	1.8	1.6	3.2	2.4
7							5.8	2.1	1.7	1.6	2.9	2.2
8							5.0	2.0	1.7	2.0	2.5	2.3
9							3.5	1.8	1.7	2.0	2.4	2.4
10							3.9	1.9	1.7	2.0	2.4	2.5
11							3.2	2.1	1.7	1.9	2.5	2.6
12							4.3	2.3	1.7	1.8	2.4	2.5
13							3.6	2.3	1.8	1.7	2.6	2.5
14							5.1	2.2	1.9	1.7	2.6	2.4
15							4.7	2.1	3.0	1.7	2.5	2.5
16							3.4	2.1	4.0	1.8	2.5	2.5
17							2.8	2.3	3.0	2.9	2.5	2.5
18							2.6	2.1	2.8	4.0	2.5	2.5
19						2.4	2.5	3.0	2.5	2.4	2.7	2.4
20						2.5	2.5	3.8	1.9	2.1	2.5	2 6
21						2.5	2.3	3.6	1.8	2.2	2.6	3.0
22						2.6	2.1	3.2	2.0	2.2	2.6	2.8
23						2.4	2.1	2.1	1.9	2.1	2.5	2.5
24						2.3	2.1	2.0	2.0	2.0	2.5	2 5
25						2.2	2.3	2.1	1.9	2.1	2 4	2.8
26						2.2	2.3	1.9	1.9	2 0	2.4	3.3
27						2.2	1.9	1.8	2.0	2.0	2.5	3.8
28						4.4	1.8	1.8	1.9	2.0	2.5	2.6
29						4.0	1.7	1.7	1.8	2.1	2.5	2.7
30						2.9	1.8	1.7	1.8	2.1	2.4	2.7
31							1.8	1.8		2.2		2.7
1904.												
1	2.7	2.8	2.8	2.5	1.8	3.1	2 2	4.6	2.2	1.65	1.4	2.1
2	2.6	2.9	2.7	2.7	1.8	3.1	1.3	4.6	2.1	1.5	1.4	2.1
3	2.5	2.6	2.6	2.4	1.85	2.3	1.4	2.3	2.0	1.5	2.0	4.0
4	2.4	2.5	3.4	2.25	1.9	1.9	1.3	1.8	2.0	1.8	2.9	3.1
5	2.5	2.6	3.2	2.3	1.55	1.45	1.3	3.8	2.05	1.7	2 9	3.7
6	2.5	2.6	3.1	2.4	1.3	1.4	1.3	3.6	2.05	1.6	2.4	3.6
7	2.5	3.2	4.1	2.45	1.8	1.3	1.3	3.8	2.1	1.6	2.2	3.2
8	2.5	3.1	3.6	2.2	1.9	3.4	1.35	3.85	2.0	1.7	2.1	3.0
9	2.5	3.3	3.4	2.9	1.8	2.0	1.35	5.35	2.0	1.6	2.0	2.1
10	2.5	4.2	3.2	2.7	1.8	1.6	2.7	5.5	2.0	1.45	1.9	2.9
11	2.7	5.1	3.1	2.6	1.8	1.6	2.0	4.0	2.0	1.5	1.8	2.6
12	2.8	3.8	3.1	2.3	1.65	1.6	1.7	2.8	2.0	1.5	1.8	2.6
13	2.6	3.5	2.8	2.25	1.55	1.5	1.5	2.6	2.0	1.4	3.2	2.6
14	2.6	3.7	2.7	2.3	1.45	1.5	1.4	2.4	1.95	1.5	3.6	2.5
15	2.9	3.5	3.2	2.25	1.65	1.5	1.5	2.4	1.9	1.5	3.0	2.7
16	2.7	3.5	2.8	2.2	1.6	1.4	1.35	2.2	1.85	1.5	2.1	3.3
17	2.6	3.3	2.5	2.1	1.5	1.4	1.3	2.05	1.8	1.4	2.2	3.0
18	2.5	3.1	2.4	2.0	1.5	1.4	1.8	2.0	1.8	1.5	2.0	2.1
19	2.6	3.1	2.7	2.1	1.45	1.35	1.6	1.9	1.8	1.5	2.0	2.1
20	2.7	3.1	2.6	2.1	1.4	1.3	1.5	1.8	1.8	1.4	2.0	2.1
21	2.8	3.7	2.9	2.05	1.4	1.3	1.2	1.8	1.7	1.6	2.0	2.6
22	2.9	4.0	2.6	2.0	1.4	1.4	1.4	1.8	1.7	1.5	2.0	2.6
23	4.2	3.7	2.6	2.0	1.25	1.25	1.5	1.9	1.75	1.4	2.6	2.6
24	3.9	3.3	2.6	2.0	1.6	1.2	1.85	1.8	1.8	1.4	2.8	2.6
25	3.0	3.0	3.0	1.9	1.3	1.2	1.45	1.8	1.8	1.4	2.8	2.6
26	2.8	3.1	2.9	2.0	1.25	1.2	2.5	1.7	1.8	1.7	2.6	2.5
27	2.8	3.1	3.4	2.0	1.25	1.2	1.8	5.1	1.7	1.5	2.3	2.5
28	3.0	3.0	3.3	2.0	1.25	1.1	1.6	5.0	1.8	1.4	2.2	2.6
29	3.0	2.9	2.5	1.95	1.3	1.5	2.5	3.6	1.6	1.4	2.2	2.6
30	2.9		2.5	1.9	1.6	1.55	2.25	2.5	1.6	1.4	2.4	3.0
31	2.9		2.6		3.0		2.1	2.3		1.4		2.8

Rating table for Williamsons Swamp Creek at Davisboro, from June 19 to December 31, 1903.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.50	40	2.60	95	3.70	175	4.80	270
1.60	44	2.70	101	3.80	183	4.90	279
1.70	48	2.80	108	3.90	191	5.00	288
1.80	52	2.90	115	4.00	199	5.10	297
1.90	57	3.00	122	4.10	207	5.20	306
2.00	62	3.10	129	4.20	216	5.30	315
2.10	67	3.20	136	4.30	225	5.40	324
2.20	72	3.30	143	4.40	234	5.50	334
2.30	77	3.40	151	4.50	243	5.60	344
2.40	83	3.50	159	4.60	252	5.70	354
2.50	89	3.60	167	4.70	261	5.80	364

a This rating table can not be applied to the 1904 gage heights, owing to the shifting character of the stream bed.

Estimated monthly discharge of Williamsons Swamp Creek at Davisboro.

Month	Discharge in second-feet		
	Maximum	Minimum	Mean
1903			
June 19-30	234	72	107
July	364	48	127
August	199	48	85
September	199	48	66
October	199	40	65
November	234	67	94
December	183	72	97

CANNOOCHEE RIVER NEAR GROVELAND

This station was established June 12, 1903, by F. A. Murray, at Moody's bridge, 3 miles south of Groveland, Bryan County.

The channel is straight for about 300 feet above and 400 feet below the station. The current is swift in the main channel, but sluggish near the banks. Both banks are of clay and sand, and overflow at from 15 to 16 feet gage height. The bed of the stream is of silt, and is shifting. There is but one channel at all stages, broken by the piers of the bridge, up to the height at which the river overflows its banks.

Discharge measurements are made from the downstream side of the nine-span wooden highway bridge. The initial point for soundings is the outer edge of the post which supports the end of the hand rail on the downstream side of the bridge on the left bank.

The original gage, reading from 0 to 17 feet, is nailed to the right

side of the upstream post of the fourth bent from the left bank. From 17 to 20 feet the post is graduated to feet and half feet. A new gage, reading from 0 to 10 feet, is fastened to the left-bank side of the upstream post of the third bent from the left bank, this being the first bent in the water at ordinary stages. Another section of the gage, reading from 5 to 10 feet, is fastened to a gum tree on the left bank 25 feet above the bridge. This gage faces the bridge, and is used for the stages which it covers. The gage is read once each day by J. M. Edwards. Bench marks were established as follows: (1) The top of the bridge floor at the fourth bent from the left end of the bridge on the upstream side opposite a point 61 feet from the initial point for soundings, marked by a cross and the letters "B. M." cut in the floor; elevation, 20.00 feet. (2) Two large wire nails driven into the tree to which the third section of the gage is fastened; elevation, 5.30 feet. Two more nails are also driven at the 8-foot mark.

Discharge measurements of Cannoochee River near Groveland.

Date	Gage height	Discharge	Date	Gage height	Discharge
1903.	*Feet*	*Sec.-ft.*	1904.	*Feet.*	*Sec.-ft.*
June 12	12.90	3,467	November 29	2.27	91
June 23	5.20	734	November 30	2.30	93
July 17	9.97	2,224			
July 17	9.92	2,562	1905.		
August 21	15.11	4,125	April 26	6.17	1,051
October 9	4.45	462	April 28	6.14	1,050
November 18	5.05	734	June 12	1.60	30
December 29	6.20	1,014	July 27	2.51	140
			July 27 *b*	2.50	133
1904.			November 7 *b*	1.25	23
February 20	9.45	2,075	November 7 *b*	1.26	27
July 22	1.58	27			
July 22 *a*	1.61	30	1906.		
September 12	4.16	438	April 14	4.92	1,680
September 12	4.16	435	May 18	4.43	920
October 29 *a*	1.54	29	October 9	5.19	2,170
October 29 *a*	1.54	31	October 10	5.02	1,810

a Wading 1,000 feet below bridge. *b* Made at different section.

Daily gage height, in feet, of Cannoochee River near Groveland.

Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.
1903.												
1							9.8	2.6	5.5	5.7	3.8	4.4
2							8.0	2.6	5.1	5.4	3.9	4.3
3							6.9	2.6	5.0	5.3	5.4	4.3
4							6.4	2.7	4.5	5.1	6.2	4.2
5							6.1	3.2	4.8	4.8	6.7	4.1
6							6.3	4.3	4.9	4.7	6.9	4.1
7							5.9	6.0	4.6	4.6	6.6	3.9
8							5.4	6.7	4.2	4.6	6.2	3.8
9							5.9	6.7	4.0	4.5	5.9	3.8
10							6.8	5.5	3.8	4.3	5.6	4.5
11							8.7	4.9	3.7	4.2	5.2	4.6
12							10.6	4.5	3.6	4.0	5.0	4.5
13							9.7	4.9	3.7	3.9	4.8	4.3
14							9.5	7.2	3.8	3.8	4.7	4.3
15							9.2	8.1	7.0	3.8	4.7	4.3
16							9.5	10.1	13.8	3.7	4.5	4.3
17							10.0	11.1	17.8	3.7	4.5	4.1
18							9.5	17.2	18.0	5.7	5.0	3.8
19							8.9	16.7	17.3	7.9	5.0	3.9
20							8.2	16.0	16.5	8.8	4.6	3.8
21							5.5	15.2	15.7	9.4	4.5	3.9
22							5.2	15.0	14.7	8.9	4.4	4.0
23						5.2	4.9	16.0	13.2	7.9	4.2	4.1
24						5.7	3.7	15.8	11.3	6.6	4.0	4.0
25						5.6	3.5	15.1	9.6	6.0	4.0	4.0
26						5.7	3.3	13.8	8.2	5.4	4.1	4.4
27						5.2	3.3	12.0	7.3	4.7	4.5	5.2
28						6.5	3.2	10.4	6.6	4.4	4.6	5.5
29						8.1	3.0	8.5	6.3	4.2	4.5	6.2
30						9.0	2.9	7.0	6.1	4.0	4.3	6.9
31							2.7	6.0		3.9		7.7

Daily gage height, in feet, of Cannoochee River near Groveland—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
1	7.2	9.3	9.6	5.9	2.4	2.0	1.7	4.5	6.2	2.1	1.5	2.2
2	7.6	8.5	9.1	5.7	2.4	2.0	1.7	4.6	6.4	2.0	1.5	2.2
3	7.6	8.2	8.2	5.2	2.3	2.0	1.7	5.9	6.2	1.9	1.6	2.1
4	6.9	7.6	8.0	4.7	2.2	2.0	1.7	4.9	4.8	1.9	1.8	2.2
5	6.5	7.0	7.6	4.3	2.2	2.0	1.6	5.9	4.1	1.9	2.1	2.4
6	6.1	6.8	7.6	4.2	2.1	2.0	1.6	8.0	3.8	1.8	2.1	2.4
7	5.7	6.6	7.6	4.0	2.1	1.9	1.6	10.8	5.0	1.8	2.0	2.7
8	5.3	6.2	8.0	4.0	2.1	1.9	1.6	13.2	6.8	1.7	2.0	2.8
9	5.2	6.3	8.0	4.0	2.0	1.9	1.6	14.2	6.0	1.7	2.0	2.9
10	5.1	7.6	8.1	4.4	2.0	1.9	1.6	14.2	4.7	1.7	2.0	2.8
11	4.9	12.5	7.6	4.8	2.0	1.9	1.9	13.7	4.1	1.7	1.9	2.8
12	5.2	14.5	7.7	5.0	2.0	1.8	1.9	11.0	4.1	1.7	1.9	2.8
13	5.2	15.4	7.4	5.2	2.0	1.8	1.9	9.9	3.9	1.6	2.0	2.8
14	5.2	15.3	7.1	5.3	2.0	1.7	2.1	8.9	3.5	1.6	2.5	2.7
15	5.0	14.5	7.1	5.1	2.0	1.7	2.0	7.9	3.2	1.6	2.7	2.6
16	5.0	13.7	6.9	4.8	2.0	1.7	1.8	6.9	3.0	1.6	2.6	2.4
17	5.0	13.7	6.7	4.3	1.9	1.6	1.7	6.0	2.9	1.7	2.5	2.4
18	4.7	11.5	6.4	3.8	1.8	1.6	1.6	5.3	2.8	1.7	2.5	2.5
19	4.5	10.2	6.2	3.5	1.8	1.6	1.6	4.8	2.9	1.7	2.5	2.6
20	4.4	9.5	6.0	3.0	1.7	1.6	1.6	4.6	2.5	1.7	2.5	2.6
21	4.4	9.2	5.8	3.2	1.7	1.7	1.6	4.4	2.4	1.7	2.3	2.4
22	4.0	10.0	5.5	3.4	1.7	1.8	1.5	4.2	2.4	1.6	2.2	2.4
23	5.5	11.5	5.3	3.6	1.7	1.9	1.8	4.0	2.7	1.6	2.2	2.7
24	9.7	12.3	5.2	3.0	1.6	1.9	2.0	3.8	3.0	1.6	2.2	2.4
25	11.6	13.7	5.9	2.8	1.6	1.9	2.2	3.9	2.7	1.6	2.3	2.3
26	12.7	12.5	6.8	2.6	1.6	1.9	2.4	4.2	2.6	1.6	2.4	2.2
27	13.4	11.7	7.2	2.5	1.6	1.9	2.2	4.5	2.5	1.5	2.4	2.2
28	12.2	10.2	8.0	2.5	1.6	1.8	2.0	4.9	2.4	1.5	2.2	2.2
29	11.0	9.8	7.6	2.5	1.9	1.8	2.0	5.2	2.3	1.5	2.2	2.4
30	10.5	.....	6.9	2.3	1.8	1.8	1.9	5.6	2.2	1.5	2.2	2.5
31	9.8	.....	6.3	.....	1.9	.....	2.3	5.9	.....	1.5	.....	2.7
1905												
1	2.6	3.3	9.8	6.2	4.9	2.5	2.0	3.0	3.2	1.5	1.4	1.3
2	2.6	3.3	8.7	6.2	4.9	2.6	2.2	3.9	3.0	1.5	1.3	1.3
3	2.6	3.3	7.7	5.5	4.9	2.4	2.5	3.6	2.8	1.5	1.3	1.8
4	2.6	3.3	7.5	5.3	4.7	2.3	2.4	3.5	2.4	1.4	1.3	2.2
5	2.6	3.2	7.0	5.1	4.5	2.1	2.3	3.5	2.0	1.4	1.3	2.5
6	2.6	3.4	6.3	5.4	4.5	1.9	3.7	3.4	2.4	1.4	1.3	2.4
7	2.7	3.6	6.4	5.7	4.5	1.8	4.5	3.0	2.6	1.4	1.3	2.2
8	2.9	4.0	6.2	5.7	4.5	1.8	7.4	2.8	2.4	1.5	1.3	2.3
9	2.9	4.7	6.2	5.6	4.4	1.7	7.5	2.6	2.2	1.6	1.3	2.5
10	2.8	5.3	6.2	5.6	4.3	1.7	7.7	2.5	2.2	1.5	1.3	2.8
11	2.8	5.6	6.7	6.0	4.0	1.6	7.7	2.2	2.0	1.4	1.5	2.8
12	2.8	6.6	8.0	6.0	3.4	1.6	7.9	2.0	2.0	1.4	1.5	2.7
13	3.0	8.1	10.4	6.4	3.0	1.6	8.0	2.3	1.9	1.4	1.5	2.5
14	3.5	10.1	13.4	7.2	3.0	1.6	7.2	2.6	1.8	1.4	1.5	2.8
15	4.0	11.2	14.2	7.4	3.0	1.6	6.5	3.1	1.8	1.4	1.4	3.0
16	4.5	11.9	14.1	9.2	2.9	1.8	6.5	3.1	1.9	1.4	1.3	3.4
17	4.4	13.1	13.9	6.8	2.5	2.0	6.5	3.1	1.8	1.4	1.3	3.3
18	4.3	14.8	13.8	6.5	2.4	2.6	6.0	3.2	1.7	1.4	1.3	3.2
19	4.2	14.5	13.7	6.5	2.4	2.8	6.2	3.3	1.9	1.3	1.3	3.0
20	4.1	13.1	13.0	6.4	2.4	3.1	6.3	4.0	1.9	1.3	1.3	3.1
21	4.1	11.0	12.1	6.2	2.4	3.3	5.3	5.0	2.0	1.3	1.3	3.6
22	4.0	10.5	11.2	6.0	2.6	3.0	3.8	5.6	2.0	1.3	1.3	4.3
23	3.9	11.6	10.2	5.9	2.7	2.5	3.2	6.0	1.8	1.3	1.3	4.2
24	3.6	11.7	9.2	5.8	2.8	2.6	3.1	4.2	1.7	1.3	1.4	4.8
25	3.6	11.5	8.0	5.9	2.9	2.6	2.6	3.3	1.7	1.3	1.4	5.1
26	3.5	13.0	8.9	6.1	2.8	2.5	2.1	3.0	1.6	1.4	1.4	5.0
27	3.5	12.0	7.6	6.1	2.8	2.3	2.0	3.2	1.6	1.4	1.4	4.8
28	3.4	10.7	6.9	5.8	2.8	2.0	2.2	3.5	1.6	1.4	1.3	4.7
29	3.2	.....	6.7	5.4	2.7	1.9	2.3	3.6	1.5	1.4	1.3	4.7
30	3.1	.....	6.5	5.0	2.6	1.8	2.3	3.7	1.5	1.4	1.3	4.8
31	3.3	.....	6.2	.....	2.5	.....	2.9	3.4	.....	1.4	.....	4.7

Daily gage height, in feet, of Cannoochee River near Groveland, Ga., for 1906.

Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.8	10.1	7.7	7.3	2.4	3.4	4.7	9.0	5.8	3.8	2.4	2.1
2	5.0	9.6	7.0	6.9	2.3	3.1	5.7	10.5	6.0	3.8	2.4	2.1
3	5.4	8.6	6.8	6.6	2.2	2.9	5.2	13.0	6.2	3.9	2.3	2.1
4	5.7	7.0	8.9	6.4	2.2	3.9	5.8	11.9	6.1	5.3	2.2	2.2
5	6.0	6.6	11.7	5.8	2.2	4.5	6.4	10.5	6.0	7.4	2.3	2.5
6	6.6	6.1	12.5	5.2	2.1	5.7	7.1	10.0	5.9	8.4	2.3	2.5
7	7.1	6.1	11.4	4.8	2.5	7.6	7.6	9.7	5.8	7.4	2.3	2.7
8	7.0	7.0	10.0	4.8	5.0	8.4	7.7	9.0	5.0	6.8	2.2	2.9
9	6.6	7.8	10.4	4.6	5.5	7.5	7.8	8.0	4.6	5.2	2.1	2.7
10	6.2	9.1	11.1	4.1	4.6	4.7	9.1	7.0	4.0	4.5	2.1	2.5
11	6.1	10.0	11.3	4.0	4.3	4.2	10.4	6.5	3.6	4.3	2.1	2.3
12	5.8	11.1	10.9	3.9	3.7	7.0	12.7	5.0	3.3	4.0	2.0	2.3
13	5.6	11.7	10.5	3.8	3.3	9.6	10.8	5.5	3.3	3.5	2.0	2.3
14	5.4	12.0	9.9	3.7	3.0	11.9	9.6	4.9	3.3	3.5	2.0	2.3
15	5.3	11.6	9.2	4.0	2.8	14.0	8.0	4.9	3.0	3.0	2.1	2.3
16	5.2	11.2	8.3	4.8	2.6	17.0	7.2	5.0	3.3	3.0	2.2	2.2
17	5.2	11.0	7.4	4.8	2.6	17.2	9.2	4.6	3.3	2.8	2.3	2.1
18	5.1	10.5	6.8	4.9	2.5	16.4	10.9	4.5	3.4	2.7	2.4	2.0
19	5.0	9.8	6.4	5.0	2.3	15.2	12.2	4.4	3.4	2.7	2.4	2.0
20	4.9	8.9	7.0	4.9	2.3	13.2	12.5	4.3	3.5	2.9	2.4	2.0
21	4.8	7.8	8.6	4.5	2.2	11.4	13.2	3.8	3.4	3.0	2.4	2.0
22	5.0	8.5	9.7	4.3	2.1	10.2	11.9	4.0	3.2	3.2	2.4	2.1
23	5.1	9.8	9.5	3.9	2.0	8.2	10.9	4.5	3.1	3.2	2.4	2.3
24	6.4	10.3	9.4	3.8	2.1	7.2	10.7	6.0	3.0	3.1	2.4	2.5
25	6.7	9.2	9.3	3.1	3.8	6.6	10.9	6.8	3.4	3.0	2.4	2.6
26	7.5	9.42	8.9	3.0	4.8	5.5	11.9	6.4	3.6	2.9	2.3	2.6
27	9.0	8.5	8.0	2.8	5.1	4.4	12.4	6.2	3.8	2.9	2.2	2.6
28	10.3	8.2	7.3	2.6	4.4	4.3	12.2	6.5	4.3	2.8	2.2	2.6
29	11.1	.....	7.0	2.5	4.2	4.1	10.5	5.8	4.3	2.7	2.1	2.6
30	10.5	.....	7.2	2.4	3.8	4.4	9.4	5.8	3.9	2.7	2.1	2.7
31	10.7	.....	7.4	.....	3.5	.....	8.3	5.8	.....	2.7	.....	2.9

Rating tables for Cannoochee River near Groveland.

JUNE 23 TO DECEMBER 31, 1903.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.60	142	3.90	316	6.40	1,150	9.00	2,060
2.70	151	4.00	338	6.60	1,220	9.50	2,235
2.80	160	4.20	389	6.80	1,290	10.00	2,410
2.90	170	4.40	451	7.00	1,360	10.50	2,585
3.00	180	4.60	520	7.20	1,430	11.00	2,760
3.10	191	4.80	590	7.40	1,500	11.50	2,935
3.20	203	5.00	660	7.60	1,570	12.00	3,110
3.30	216	5.20	730	7.80	1,640	13.00	3,460
3.40	230	5.40	800	8.00	1,710	14.00	3,810
3.50	245	5.60	870	8.20	1,780	15.00	4,160
3.60	261	5.80	940	8.40	1,850	16.00	4,510
3.70	278	6.00	1,010	8.60	1,920	17.00	4,860
3.80	296	6.20	1,080	8.80	1,990	18.00	5,210

JANUARY 1 TO DECEMBER 31, 1904.[b]

1.50	30	2.70	149	4.60	554	8.50	1,740
1.60	36	2.80	165	4.80	606	9.00	1,915
1.70	42	2.90	182	5.00	660	9.50	2,095
1.80	49	3.00	200	5.20	714	10.00	2,275
1.90	57	3.10	218	5.40	769	11.00	2,650
2.00	65	3.20	237	5.60	825	12.00	3,025
2.10	74	3.40	276	5.80	882	13.00	3,400
2.20	84	3.60	317	6.00	940	14.00	3,775
2.30	95	3.80	360	6.50	1,090	15.00	4,150
2.40	107	4.00	405	7.00	1,245		
2.50	120	4.20	453	7.50	1,405		
2.60	134	4.40	503	8.00	1,570		

JANUARY 1 TO DECEMBER 31, 1905.[c]

1.30	27	1.90	66	2.50	131	3.10	220
1.40	32	2.00	75	2.60	144	3.20	238
1.50	38	2.10	85	2.70	158	3.30	257
1.60	44	2.20	96	2.80	172		
1.70	51	2.30	107	2.90	187		
1.80	58	2.40	119	3.00	203		

JANUARY 1 TO DECEMBER 31, 1906.

2.00	75	3.30	257	4.60	554	6.80	1,183
2.10	85	3.40	276	4.70	580	7.00	1,245
2.20	96	3.50	296	4.80	606	7.20	1,309
2.30	107	3.60	317	4.90	633	7.40	1,373
2.40	119	3.70	338	5.00	660	7.60	1,438
2.50	131	3.80	360	5.20	714	7.80	1,504
2.60	144	3.90	382	5.40	769	8.00	1,570
2.70	158	4.00	405	5.60	825	9.00	1,915
2.80	172	4.10	429	5.80	882	10.00	2,275
2.90	187	4.20	453	6.00	940	11.00	2,650
3.00	203	4.30	478	6.20	1,000	12.00	3,025
3.10	220	4.40	503	6.40	1,060		
3.20	238	4.50	528	6.60	1,121		

NOTE.—The above table is based on discharge measurements made during 1903-1906 and is well defined below gage height 6.2 feet. Above gage height 10 feet the rating curve is a tangent, the difference being 375 per foot.

a Above gage height 4.50 feet the rating curve is a tangent, the difference being 35 per tenth.
b Above 10 feet the rating curve is a tangent, the difference being 75 per 0.2 foot rise in gage.
c Above 3.3 feet this table is the same as the one for 1904.

Estimated monthly discharge of Cannoochee River near Groveland.

[Drainage area, 960 square miles.]

Month.	Discharge in second-feet.			Run-off.	
	Maximum.	Minimum.	Mean.	Sec. ft. per sq. mile.	Depth in inches.
1903.					
June 22-30	2,060	730	1,141	1.19	0.354
July	2,620	151	1,242	1.29	1.49
August	4,980	142	2,100	2.19	2.52
September	5,210	261	1,855	1.93	2.15
October	2,200	278	774	.806	.929
November	1,325	296	646	.673	.751
December	1,605	296	499	.520	.600
1904.					
January	3,550	405	1,217	1.27	1.58
February	4,300	1,000	2,508	2.61	2.82
March	2,131	714	1,301	1.36	1.57
April	911	95	428	.446	.498
May	107	36	60.8	.063	.073
June	65	36	52.2	.054	.060
July	107	30	52.6	.055	.063
August	3,850	360	1,324	1.38	1.59
September	1,133	84	390	.406	.453
October	74	30	42.0	.044	.051
November	149	30	84.1	.088	.098
December	182	74	122	.127	.146
The year	4,300	30	640	.667	9.00
1905.					
January	528	144	279	.291	.336
February	4,075	238	1,885	1.96	2.04
March	3,850	1,000	2,050	2.14	2.47
April	1,987	660	976	1.02	1.14
May	633	119	299	.311	.358
June	257	44	102	.106	.118
July	1,570	75	649	.676	.779
August	940	75	297	.309	.356
September	238	38	84.6	.088	.098
October	44	27	32.2	.034	.039
November	38	27	29.5	.031	.035
December	687	27	295	.307	.354
The year	4,075	27	582	.606	8.12
1906.					
January	2,690	606	1,120	1.17	1.35
February	3,020	970	2,010	2.09	2.18
March	3,210	1,060	1,920	2.00	2.31
April	1,340	119	539	.561	.63
May	797	75	272	.283	.33
June	4,980	187	1,750	1.82	2.03
July	3,480	580	2,120	2.21	2.55
August	3,400	257	1,230	1.28	1.48
September	1,000	203	468	.488	.54
October	1,710	158	432	.450	.52
November	119	75	102	.106	.12
December	187	75	118	.123	.14
The year	4,980	75	1,010	1.05	14.18

MISCELLANEOUS MEASUREMENTS IN OGEECHEE RIVER DRAINAGE BASIN.

Buckhead Creek.—This stream was measured at Daniels Bridge, 1 mile northwest of Millen. The bench mark is the top of first bent from a large cypress stump near the right bank, downstream side of bridge.

Discharge measurements of Buckhead Creek at Daniels Bridge, 1 mile northwest of Millen.

Date	Height of bench mark above water	Discharge
1903	*Feet*	*Sec.-ft.*
June 10	4.68	617
June 11	3.33	1,163
June 20	6.71	251
July 18	5.02	500
October 10	9.34	107

Bull Creek.—At the new bridge 2 miles southeast of Claxton this stream was discharging 18 second-feet on June 22, 1903, when the water surface was 5.40 feet below the top of the upstream end of the cap of the first bent from right bank.

Cannoochee River.—At Moores Bridge, 2½ miles northwest of Groveland, this stream was discharging 1,958 second-feet on June 9, 1903, when the water surface was 6.87 feet below the top of the first bent from the right bank, upstream side of bridge.

At Hendrix Bridge, 1½ miles from Claxton, this stream was discharging 469 second-feet on June 22, 1903, when the water surface was 13.40 feet below the bridge floor at 50 feet from the outer edge of the post at the end of the hand rail, right bank, upstream side.

Cedar Creek.—At 1¾ miles northwest of Claxton this stream was discharging 11 second-feet on June 22, 1903, when the water surface was 10.13 feet below the bridge floor at midstream.

Little Ogeechee River.—Near Agricola this stream was discharging 4.2 second-feet on October 14, 1903, when the water surface was 13.83 feet below the top of the floor at the hand-rail brace.

Lotts Creek.—This stream was measured at a foot log 100 yards above its mouth, about 2 miles northwest of Groveland. The bench mark is a large spike in a 9 by 9 post near right bank.

Discharge measurements of Lotts Creek, about 2 miles northwest of Groveland.

Date	Height of bench mark above water	Discharge
1908	*Feet*	*Sec.-ft.*
June 23	8.00	253
October 9	9.47	119
October 9	9.47	112

A measurement made June 12, 1905, gave the following results:

Width, 16 feet; area, 11.4 square feet; mean velocity, 1.18 feet per second; discharge, 13 second-feet.

Ogeechee River.—At Harrisons Bridge, 2 miles west of Agricola, this stream was discharging 24 second-feet on October 14, 1903, when the water surface was 19.56 feet below the top of the bent at the right end of the bridge, downstream side.

At the wagon bridge 5 miles northeast of Davisboro this stream was discharging 197 second-feet on November 20, 1903, when the water surface was 12.20 feet below the top of the second bent from the left bank.

Williamsons Swamp Creek (west prong).—At Buffalo Ford, near Sandersville, this stream was discharging 16 second-feet on July 2, 1903, when the water was at ordinary stage.

Williamsons Swamp Creek (north prong).—At Jones Bridge, near Sandersville, this stream was discharging 19 second-feet on July 2, 1903, when the water was at ordinary stage.

Williamsons Swamp Creek.—At Jordans Mill Bridge, near Sandersville, this stream was discharging 95 second-feet on July 2, 1903, when the water was at ordinary stage.

ALTAMAHA RIVER DRAINAGE BASIN.

DESCRIPTION OF BASIN.

Altamaha River is formed by the junction of Oconee and Ocmulgee rivers, which unite at the southern boundary of Montgomery County, Ga. Ohoopee River is also a tributary, entering from the north side about 50 miles below the junction of the Oconee and Ocmulgee. The Altamaha River drainage is entirely within the State of Georgia. The river rises in the north-central part and flows in a southeasterly direction, emptying into the Atlantic Ocean near Darien. Below the junction of the Oconee and Ocmulgee and for a long distance above, on both rivers, there is no great amount of fall. Steamboat navigation is carried on from Darien to Macon on the Ocmulgee, and to Dublin, and at times to Milledgeville, on the Oconee.

Ohoopee River rises in Washington County and flows in a southeasterly direction to the Altamaha. It flows from the low hills of southeastern Georgia into the flat pine lands. Though it has not so much fall as the more northern streams, it has considerable fall that can be developed into power.

Oconee River rises on the southern slope of the Chattahoochee Ridge, in Hill County, and joins the middle Oconee on the southwest boundary of Clarke County. From there it flows in a southeasterly direction to the Altamaha. Apalachee River is a large tributary which rises in Gwinnett and Walton counties and enters the Oconee near the southeastern corner of Morgan County. Little River enters the main stream at the corner of Putnam, Hancock, and Baldwin counties, about 15 miles above Milledgeville, Ga. These tributaries have much fall, and a small part of it is developed. The Oconee has a fall of 250 feet in 45 miles. It has some very large water powers available from its source down to Milledgeville, where it crosses the fall line.

Ocmulgee River, the most westerly of the main tributaries, rises in the north-central part of Georgia on the southern slope of the Chattahoochee Ridge in Fulton, DeKalb, and Gwinnett counties. It is formed by the junction of Yellow and South rivers just south of the southern corner of Newton County. Yellow River rises in Gwinnett County and flows in a southerly direction into the Ocmulgee. South River rises in Fulton and DeKalb counties and flows

in a southeasterly direction. Alcovy River joins the Ocmulgee about 5 miles below the junction of the South and Yellow rivers. Towaliga River enters the Ocmulgee at about the southwest corner of Jasper County.

All these tributaries rise in and flow through a very hilly country and have a great deal of fall. Ocmulgee River has a fall of over 210 feet in 35 miles. The last fall of much size is only a few miles above Macon, Ga.

STREAM FLOW.

SOUTH RIVER NEAR LITHONIA.

This station was established by F. A. Murray on August 17, 1903, a short distance above Albert Shoals, 6 miles south of Lithonia, and was discontinued on December 31, 1904.

The channel above the station is nearly straight for about 300 feet, and the current is sluggish, being held back by rock ledges below the station. Below the station the channel curves slightly and the current is sluggish for about 400 feet, at which point the shoals begin. The right bank is low and overflows at a gage height of 9 or 10 feet into a second channel, which has a width at high water of about 200 feet. The left bank is high and rocky, and does not overflow. The bottom is solid rock.

Discharge measurements were made from the 3-span wooden highway bridge. The initial point for soundings is the end of the bridge on the right bank, upstream side.

The gage is a vertical 10-foot rod fastened to a tree on the right bank just below the bridge. It was read once each day by W. N. New, who was paid by the Georgia Geological Survey.

Bench mark No. 1 is the top of the upstream end of the first wooden floor beam from the right bank; elevation, 15.00 feet above the zero of the gage. Bench mark No. 2 is the center of a wire nail driven horizontally in the upstream side of the base of a willow tree on the left bank about 40 feet upstream from the bridge; elevation, 4.00 feet above the zero of the gage.

Discharge measurements of South River near Lithonia.

Date	Gage height	Discharge	Date	Gage height	Discharge
1903	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft.*
August 17	3.55	179	March 11	3.67	185
September 10	3.43	104	July 16	3.22	56
September 10a	3.46	120	August 9	4.90	1,172
October 5	3.40	104	August 9	4.60	984
1904			August 10	4.58	812
January 13	3.58	138	September 28	3.16	55
March 7	4.20	549	December 5	4.28	588

a Parkers Bridge, 1 mile above station.

Daily gage height, in feet, of South River, near Lithonia.

Day.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Aug.	Sept.	Oct.	Nov.	Dec.
1903.						1903.					
1	.....	3.5	3.5	3.5	3.5	17	3.5	3.9	3.5	3.5	3.5
2	.....	3.4	3.5	3.5	3.5	18	4.1	3.6	3.6	3.6	3.5
3	.....	3.5	3.5	3.5	3.5	19	3.8	3.5	3.5	3.6	3.5
4	.....	3.4	3.5	4.6	3.5	20	3.6	3.4	3.5	3.5	3.6
5	.....	3.4	3.5	4.0	3.5	21	3.5	3.5	3.5	3.5	3.5
6	.....	3.4	3.5	3.6	3.5	22	3.6	3.5	3.5	3.5	3.5
7	.....	3.5	3.5	3.6	3.5	23	3.4	3.5	3.5	3.5	3.5
8	.....	3.4	3.5	3.6	3.5	24	3.5	3.5	3.5	3.5	3.5
9	.....	3.4	3.5	3.6	3.5	25	3.5	3.5	3.5	3.5	3.5
10	.....	3.4	3.5	3.6	3.5	26	3.5	3.5	3.5	3.5	3.6
11	.....	3.5	3.5	3.6	3.5	27	3.6	3.5	3.5	3.6	3.5
12	.....	3.4	3.5	3.5	3.5	28	3.5	3.5	3.5	3.6	3.5
13	.....	3.5	3.5	3.5	3.6	29	3.6	3.5	3.5	3.5	3.5
14	.....	3.4	3.5	3.6	3.5	30	3.6	3.5	3.5	3.5	3.5
15	.....	4.5	3.5	3.5	3.5	31	3.4	.....	3.5	.....	3.5
16	.....	4.4	3.5	3.5	3.5						

Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	3.5	3.6	3.6	3.6	3.6	4.1	3.7	3.6	3.5	3.4	3.3	3.5
2	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.5	3.4	3.3	3.5
3	3.5	3.6	3.6	3.6	3.6	3.6	3.6	4.3	3.5	3.4	3.3	3.5
4	3.5	3.5	3.7	3.6	3.6	3.5	3.5	3.6	4.2	3.4	3.3	3.5
5	3.5	3.5	3.6	3.6	3.6	3.6	3.5	3.5	3.8	3.4	3.3	4.3
6	3.5	3.6	3.5	3.6	3.5	3.8	3.5	3.7	3.6	3.4	3.3	3.7
7	3.5	3.6	4.2	3.7	3.5	4.4	3.5	5.7	3.6	3.4	3.3	3.6
8	3.5	4.1	4.1	3.7	4.1	3.8	3.5	6.3	3.6	3.4	3.3	3.6
9	3.5	3.7	3.65	3.6	3.7	3.7	3.5	6.5	3.6	3.3	3.3	3.5
10	3.5	4.5	3.6	3.7	3.6	3.6	3.6	4.6	3.6	3.2	3.3	3.6
11	3.5	4.3	3.7	3.6	3.6	3.6	3.5	3.8	3.6	3.3	3.3	3.6
12	3.5	3.7	3.7	3.7	3.6	3.6	3.6	3.7	3.6	3.3	3.3	3.6
13	3.5	3.6	3.6	3.7	3.6	3.6	3.6	3.6	3.5	3.3	3.4	3.6
14	3.5	3.7	4.1	3.6	3.6	3.5	3.6	3.6	3.5	3.3	3.3	3.6
15	3.6	3.7	3.7	3.6	3.6	3.5	3.5	3.7	3.5	3.3	3.3	3.6
16	3.5	3.6	3.7	3.6	3.6	3.5	3.5	4.2	3.5	3.2	3.3	3.6
17	3.7	3.6	3.65	3.6	3.6	3.5	3.5	3.8	3.6	3.2	3.3	3.6
18	3.6	3.7	3.6	3.6	3.6	3.5	3.6	3.6	3.5	3.2	3.3	3.6
19	3.6	3.7	3.6	3.6	3.5	3.5	3.5	4.1	3.5	3.3	3.3	3.6
20	3.6	4.5	3.6	3.6	3.5	3.6	3.5	3.6	3.5	3.3	3.3	3.6
21	3.6	4.1	3.6	3.6	3.5	3.6	3.5	3.6	3.5	3.3	3.3	3.6
22	4.6	4.6	3.7	3.6	3.6	3.8	3.5	3.6	3.5	3.3	3.4	3.6
23	4.2	4.5	3.7	3.6	3.5	3.7	3.7	3.5	3.5	3.3	3.4	3.6
24	4.1	4.3	3.7	3.6	3.5	3.6	3.6	3.5	3.5	3.2	3.4	3.6
25	4.1	3.8	3.7	3.6	3.5	3.6	3.5	3.6	3.5	3.2	3.4	3.6
26	3.6	3.7	3.7	3.7	3.5	3.5	3.5	3.5	3.5	3.2	3.4	3.6
27	3.6	3.7	3.6	3.7	3.5	3.5	3.5	3.6	3.5	3.2	3.4	3.8
28	3.5	3.7	3.6	3.6	3.5	3.8	3.5	3.7	3.4	3.2	3.4	3.9
29	3.5	3.6	3.6	3.6	3.5	3.8	4.5	3.6	3.4	3.2	3.4	3.6
30	3.5	.....	3.6	3.6	3.8	3.8	3.7	3.6	3.4	3.2	3.4	3.6
31	3.5	.....	3.6	.....	4.6	.....	3.5	3.5	.....	3.2	.....	3.6

Rating table for South River, near Lithonia, from August 17, 1903, to December 31, 1904.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Sec.-ft.*	*Feet.*	*Sec.-ft.*	*Feet.*	*Sec.-ft.*	*Feet.*	*Sec.-ft.*
3.20	55	4.10	454	5.00	1,220	5.80	2,050
3.30	77	4.20	530	5.10	1,320	5.90	2,190
3.40	100	4.30	606	5.20	1,420	6.00	2,340
3.50	130	4.40	684	5.30	1,520	6.20	2,660
3.60	168	4.50	764	5.40	1,620	6.40	3,020
3.70	214	4.60	848	5.50	1,720	6.60	3,400
3.80	266	4.70	936	5.60	1,820	6.80	3,800
3.90	322	4.80	1,025	5.70	1,930		
4.00	384	4.90	1,120				

Estimated monthly discharge of South River near Lithonia.

Month.	Discharge in second-feet.		
	Maximum.	Minimum.	Mean.
1903.			
August 17–31	454	100	169
September	764	100	167
October	168	130	131
November	848	130	178
December	168	130	135
1904.			
January	848	130	198
February	848	130	318
March	530	130	213
April	214	168	179
May	848	130	189
June	684	130	206
July	764	130	168
August	3,800	130	502
September	530	100	155
October	100	55	74.4
November	100	77	84.7
December	606	130	186
The year	3,800	55	206

SOUTH RIVER NEAR SNAPPING SHOALS.

This station was established in 1905 for the purpose of making a series of miscellaneous discharge measurements. It is located at a four-span wooden bridge, known as Butlers Bridge, about 15 miles south from Conyers, and 4 miles above Snapping Shoals, where there is a large amount of fall.

The current is smooth and is fairly swift at lowest water. It is broken by one pier at low water. The right bank may overflow beyond the bridge approach at high floods. The left bank will not overflow. The bed is sandy and will probably change.

Gage heights are determined directly from the bench mark, which is the top of the downstream end, at the edge of the floor, of the first wooden floor beam from the left end of the third span from the left bank; elevation, 25.00 feet above the datum of the assumed gage.

Discharge measurements of South River, near Snapping Shoals.

Date.	Gage height.	Discharge.
1905.	*Feet.*	*Sec.-ft.*
October 23	3.46	120
October 24	3.56	135

OCMULGEE RIVER NEAR FLOVILLA.

A station was established July 26, 1901, on Ocmulgee River at Lamars Ferry, one-half mile below Lamar's mill and 5 miles east of Flovilla. The object of this station was to compare the discharge of the river at this point with its discharge below, at Macon, through the low-water season. The gage and bench marks were washed away by a flood February 27, 1902. The station was reestablished June 18, 1903, at Lamars Ferry, by M. R. Hall.

The channel is straight for 1,000 feet above and 5,000 feet below the station. The current is swift and regular. The right bank is high, but overflows at extreme high water. The left bank is somewhat lower. The bed of the stream is sandy and shifting, and there is but one channel.

Discharge measurements are made from the ferryboat. The initial point for soundings is the windlass on the right bank.

The vertical gage is in three sections: The first section, reading from 0 to 5 feet, is fastened to a willow tree at the mouth of a small branch about 20 feet above the ferry landing on the right bank; the second section, reading from 5 to 15 feet, is nailed to an ash tree about 60 feet from the river up the same branch; the third section, reading from 15 to 25 feet, is attached to a cottonwood tree on the bank of the same branch, about 200 feet from the river. No attempt was made to place this gage on the same datum as the old one. The gage is read once each day by B. S. White, who is paid by the Georgia Geological Survey. During the low-water period from October 1 to December 31, 1905, the gage was read twice each day. Bench marks were established as follows: (1) A nail driven into a large cottonwood tree about 200 feet from the river, on the branch on which the gage is located; elevation, 14.00 feet. (2) A cross in the solid rock, 100 feet uphill from the first bench mark and

VIEW OF THE EAGLE AND PHENIX MILLS, COLUMBUS, GEORGIA.

140 feet north from the wagon road, at a point 250 feet west of the ferry; elevation, 34.24 feet. Elevations refer to the datum of the gage.

Discharge measurements of Ocmulgee River near Flovilla.

Date.	Gage height.	Discharge.	Date.	Gage height.	Discharge.
1901.	*Feet.*	*Sec.-ft.*	1904.	*Feet.*	*Sec.-ft.*
July 26	a2.93	1,085	January 22	5.50	3,459
September 12	a3.10	1,087	February 16	2.93	1,745
November 5	a2.90	948	April 15	1.67	970
1902.			May 28	.50	511
February 10	a5.60	2,376	June 17	.47	463
1903.			July 12	1.39	891
June 18	2.00	1,383	August 26	2.36	1,450
August 25	1.61	893	September 20	.03	332
September 29	1.35	771	October 6	.21	302
October 13	1.10	701	November 2	.03	406
November 12	1.78	1,070	December 21	.93	740
December 19	1.61	879	1905.		
1904.			March 25	1.88	1,155
January 13	1.97	1,130	June 15	1.16	1,074
January 21	1.85	1,003	July 24	.34	496
			September 29	.32	293
			November 3	.27	474

a Old gage for 1901 and 1902 measurements.

Daily gage height, in feet, of Ocmulgee River near Flovilla.

Date.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Date.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1901.							1901.						
1		3.0	7.9	3.5	2.7	2.8	17		10.0	7.5	3.0	2.7	5.3
2		2.7	6.7	5.9	2.8	2.7	18		2.7	17.4	3.0	2.7	4.5
3		2.6	4.5	6.5	2.8	3.8	19		6.9	13.8	2.9	2.7	4.0
4		2.5	4.1	5.1	2.8	4.2	20		5.0	9.0	2.9	3.2	3.7
5		2.7	3.7	4.0	2.8	3.7	21		5.4	6.8	2.9	3.2	3.5
6		6.0	3 6	3.6	2.8	3.4	22		9.0	6.0	2.9	3.1	3.2
7		6.5	3.4	3.4	2.8	3.6	23		16.0	5.7	2.9	3.0	3.6
8		5.0	3.3	3.3	2.8	3.2	24		16.5	5.3	2.9	3.0	4.2
9		3.9	3.2	3.2	2.8	3.1	25		7.0	4.9	2.8	3.0	4.2
10		2.2	3.1	3.2	2.8	3.4	26	2.9	6.1	4.2	2.7	2.9	4.4
11		10.5	3.1	3.2	2.8	3.8	27	2.8	8.7	3.5	2.8	2.9	4.6
12		5.2	3.1	3.1	2.8	3.6	28	3.5	9.7	3.5	2.8	2.8	9.6
13		5.3	3.0	3.5	2.8	3.4	29	3.1	8.9	4.0	2.8	2.8	21.2
14		4.0	4.0	3.4	2.8	3.3	30	3.6	7.1	4.0	2.8	2.8	24.0
15		4.5	3.5	3.2	2.8	10.2	31	3.4	5.8		2.8		18.0
16		12.4	3.2	3.0	2.7	6.8							

Day.	Jan.	Feb.	Day.	Jan.	Feb.	Day.	Jan.	Feb.	Day.	Jan.	Feb.
1902.			1902.			1902.			1902.		
1	14.0	14.6	9	4.4	5.7	17	3.8	6.5	25	4.0	6.2
2	9.0	19.0	10	4.3	5.6	18	3.7	5.3	26	4.3	7.6
3	6.5	20.2	11	4.1	5.3	19	3.9	5.0	27	4.4	7.6
4	5.7	19.5	12	4.1	5.7	20	4.1	5.5	28	4.1	(a)
5	5.2	10.0	13	4.0	5.0	21	4.2	5.8	29	4.7	
6	5.0	8.1	14	3.7	4.8	22	4.7	5.6	30	5.4	
7	4.8	7.2	15	3.7	5.2	23	4.5	5.4	31	5.3	
8	4.5	6.5	16	4.0	5.7	24	4.2	5.1			

a Gage washed out February 28, 1902.

Daily gage height, in feet, of Ocmulgee River near Flovilla—Continued.

Day.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1908.							1908.						
1	2.2	1.6	1.2	1.3	1.2	1.5	17	2.9	3.3	6.5	1.8	1.5	1.7
2	1.9	1.4	1.1	1.3	1.2	1.5	18	2.4	7.5	3.9	1.8	1.7	1.7
3	2.3	2.1	1.1	1.3	1.3	1.4	19	2.3	6.1	2.8	1.7	1.7	1.6
4	2.9	4.0	1.3	1.2	1.4	1.7	20	2.1	3.4	2.4	1.5	1.8	1.7
5	2.7	3.4	1.1	1.2	3.2	1.6	21	1.9	2.7	1.9	1.4	1.5	2.0
6	2.1	2.7	0.9	1.2	2.2	1.6	22	1.7	2.4	1.8	1.3	1.5	2.0
7	2.6	2.1	0.9	1.2	2.1	1.6	23	1.6	2.1	1.7	1.2	1.6	1.9
8	3.2	1.7	0.9	1.3	2.3	1.7	24	1.5	1.9	1.6	1.2	1.6	1.7
9	3.8	1.5	0.8	1.3	1.5	1.6	25	1.5	1.6	1.5	1.1	1.7	1.7
10	2.8	1.4	0.7	1.3	1.6	2.1	26	1.4	1.5	1.5	1.1	1.6	2.0
11	3.2	1.3	0.9	1.2	1.4	2.0	27	1.3	1.4	1.4	1.1	1.6	2.5
12	5.3	1.7	0.8	1.1	1.8	1.8	28	1.2	1.3	1.4	1.2	1.5	1.9
13	4.5	1.3	0.8	1.1	1.7	1.7	29	1.3	1.2	1.4	1.2	1.5	1.8
14	9.5	3.8	1.1	1.0	1.6	1.9	30	1.5	1.1	1.3	1.2	1.5	1.7
15	6.6	5.2	6.2	0.9	1.5	1.8	31	2.0	1.2	.....	1.2	.....	1.7
16	4.0	9.2	9.9	1.2	1.5	1.7							

Day.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.						1904.					
1	2.7	0.7	0.3	0.3	0.6	17	4.0	0.0	0.6	0.6	1.0
2	2.7	.7	.3	.2	.6	18	2.7	.0	.6	.5	1.0
3	2.2	.3	.3	.2	.8	19	1.7	.0	.4	.4	1.0
4	3.2	.4	.5	.7	1.2	20	1.5	.1	.4	.4	.9
5	1.5	3.7	.3	.9	1.8	21	1.1	.1	.3	.2	1.0
6	1.0	2.3	.3	.7	4.0	22	1.2	.1	.3	.5	.9
7	4.25	1.4	.3	.6	3.8	23	.9	.4	.3	.9	.9
8	7.4	1.0	.3	.4	3.0	24	1.3	.0	.4	.5	.8
9	10.5	.8	.3	.3	2.0	25	.9	.2	.6	.4	.8
10	11.0	.5	.4	.1	2.8	26	2.4	.3	.6	.8	.7
11	7.6	.4	.5	.1	1.4	27	1.5	.3	.2	.7	1.0
12	5.0	.3	.3	.1	1.5	28	1.4	.2	.2	.4	3.5
13	4.0	.4	.3	.6	1.3	29	2.2	.1	.2	.6	3.5
14	3.9	.3	.3	1.1	1.0	30	1.1	.2	.1	.5	3.0
15	2.0	.2	.4	1.0	1.0	31	.9	.....	.3	.....	1.9
16	4.1	.2	.4	.8	.9						

Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	1.6	1.4	2.6	1.5	1.4	1.0	6.0	0.5	0.3	0.2	0.35	0.65
2	1.5	1.5	2.5	1.5	1.3	.8	6.0	.4	.7	.4	.25	.65
3	1.4	1.4	2.4	1.4	2.1	.7	4.2	.3	1.6	1.15	.20	11.2
4	1.2	1.5	2.3	1.6	3.0	.8	2.4	.0	.5	.65	.15	14.4
5	1.1	1.4	2.1	1.7	3.2	.7	2.5	.1	.6	.6	.1	10.4
6	1.3	1.5	2.0	2.2	2.5	.7	2.1	.2	.5	.45	.1	4.8
7	1.7	1.4	2.0	2.0	2.0	.6	3.7	.3	.3	.25	.5	4.0
8	1.8	5.0	2.0	1.8	1.8	.5	2.6	.5	.1	.1	.4	3.4
9	1.8	6.9	2.0	2.2	1.9	.4	2.4	2.1	.2	.15	.3	6.6
10	1.4	7.1	2.4	4.3	1.5	.2	1.7	2.5	.0	.05	.9	8.6
11	1.5	6.2	2.1	3.0	1.3	.0	4.3	2.9	.1	.8	3.5	6.1
12	2.0	5.5	2.4	2.4	1.2	.0	3.4	9.2	.1	1.05	2.55	4.2
13	6.2	12.6	3.0	2.1	1.0	1.7	7.0	6.3	.1	.75	1.75	4.0
14	6.9	10.5	2.7	1.9	.9	1.0	4.0	4.3	.1	.5	1.25	3.6
15	6.0	7.2	2.5	1.5	.8	.7	2.9	5.8	.2	.35	1.0	4.0
16	2.1	5.0	2.2	2.0	1.5	1.2	2.1	3.7	.0	.3	.65	3.8
17	2.8	4.2	1.9	1.8	1.4	1.1	1.7	2.2	.1	.4	.25	3.4
18	2.6	4.0	1.9	1.6	1.3	.9	1.5	2.0	.0	.3	.4	3.0
19	2.1	3.5	1.8	1.4	1.0	.7	1.2	1.4	.2	.42	.5	1.9
20	2.1	3.3	1.7	1.5	.8	.4	1.0	1.1	.2	.72	.45	7.2
21	2.0	5.5	2.1	1.4	.6	.3	.9	.9	.2	.0	.55	14.6
22	1.8	6.6	2.5	1.3	.8	.2	.6	.8	.3	.0	.6	9.3
23	1.7	5.3	2.2	1.3	1.3	1.8	.4	.7	.3	.0	.58	5.0
24	1.6	4.3	2.0	1.3	3.9	2.3	.3	2.5	.4	.2	.5	6.0
25	1.4	3.9	1.9	1.3	4.0	1.3	.6	2.4	.5	.2	.5	5.2
26	1.3	3.6	1.7	1.2	3.6	1.1	1.9	1.2	.6	.7	.5	3.6
27	1.4	3.2	1.6	1.2	2.2	1.5	1.5	.7	.4	.7	.75	3.5
28	1.8	2.8	1.5	1.1	2.0	1.9	.8	.5	.5	.6	.85	3.4
29	1.5	.....	1.4	1.0	1.9	2.2	.5	.4	.4	.4	.80	3.8
30	1.4	.....	1.5	2.0	1.7	1.4	.3	.4	.2	.35	.75	3.6
31	1.5	.....	1.4	.....	1.5	.....	.2	.3	.....	.3	.....	3.5

Rating tables for Ocmulgee River near Flovilla.

JULY 26, 1901, TO FEBRUARY 27, 1902.[a]

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Sec.-ft.*	*Feet.*	*Sec.-ft.*	*Feet.*	*Sec.-ft.*	*Feet.*	*Sec.-ft.*
2.50	835	3.60	1,344	5.40	2,271	13.00	6,185
2.60	870	3.70	1,395	5.60	2,374	14.00	6,700
2.70	907	3.80	1,447	5.80	2,477	15.00	7,215
2.80	947	3.90	1,498	6.00	2,580	16.00	7,730
2.90	990	4.00	1,550	6.50	2,837	17.00	8,245
3.00	1,037	4.20	1,653	7.00	3,095	18.00	8,760
3.10	1,087	4.40	1,756	8.00	3,610	19.00	9,275
3.20	1,138	4.60	1,859	9.00	4,125	20.00	9,790
3.30	1,189	4.80	1,962	10.00	4,640	21.00	10,305
3.40	1,241	5.00	2,065	11.00	5,155	22.00	10,820
3.50	1,292	5.20	2,168	12.00	5,670	23.00	11,330

JULY 1 TO DECEMBER 31, 1903.[b]

0.70	635	2.00	1,120	3.30	2,010	5.00	3,200
.80	648	2.10	1,185	3.40	2,080	5.50	3,550
.90	663	2.20	1,250	3.50	2,150	6.00	3,900
1.00	680	2.30	1,315	3.60	2,220	6.50	4,250
1.10	700	2.40	1,380	3.70	2,290	7.00	4,600
1.20	725	2.50	1,450	3.80	2,360	7.50	4,950
1.30	755	2.60	1,520	3.90	2,430	8.00	5,300
1.40	790	2.70	1,590	4.00	2,500	8.50	5,650
1.50	832	2.80	1,660	4.10	2,570	9.00	6,000
1.60	880	2.90	1,730	4.20	2,640	9.50	6,350
1.70	935	3.00	1,080	4.30	2,710	10.00	6,700
1.80	995	3.10	1,870	4.40	2,780		
1.90	1,055	3.20	1,940	4.50	2,850		

AUGUST 1 TO DECEMBER 31, 1904.

—0.60	200	0.60	525	1.80	1,020	4.00	2,350
— .50	225	.70	560	1.90	1,070	4.20	2,490
— .40	250	.80	595	2.00	1,120	4.40	2,640
— .30	275	.90	630	2.20	1,225	4.60	2,790
— .20	300	1.00	670	2.40	1,335	4.80	2,940
— .10	325	1.10	710	2.60	1,450	5.00	3,090
.00	350	1.20	750	2.80	1,570	5.50	3,475
.10	375	1.30	790	3.00	1,690	6.00	3,875
.20	400	1.40	835	3.20	1,820	6.50	4,275
.30	430	1.50	880	3.40	1,950	7.00	4,675
.40	460	1.60	925	3.60	2,080	7.50	5,085
.50	490	1.70	970	3.80	2,210		

JANUARY 1 TO DECEMBER 31, 1905.[c]

—0.60	220	0.40	510	1.40	895	2.40	1,370
— .50	245	.50	545	1.50	940	2.50	1,420
— .40	270	.60	580	1.60	985	2.60	1,470
— .30	295	.70	615	1.70	1,030	2.70	1,525
— .20	325	.80	650	1.80	1,075	2.80	1,580
— .10	355	.90	690	1.90	1,120	2.90	1,635
.00	385	1.00	730	2.00	1,170	3.00	1,690
.10	415	1.10	770	2.10	1,220		
.20	445	1.20	810	2.20	1,270		
.30	475	1.30	850	2.30	1,320		

a Above gage height 4.00 feet the rating curve is a tangent, the difference being 51.5 per tenth

b Above gage height 2.40 feet the curve is a tangent, the difference being 70 per tenth.

c Above gage height 3.0 feet the table is the same as that for 1904.

Estimated monthly discharge of Ocmulgee River near Flovilla.

[Drainage area, 1,500 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec-ft. per sq. mile	Depth in inches
1901					
August	7,987	835	2,916	1.94	2.24
September	8,451	1,087	2,219	1.48	1.65
October	2,337	907	1,223	.82	.94
November	1,138	907	1,593	1.06	1.18
December	11,850	907	2,531	1.69	1.95
1902					
January	6,700	1,395	2,020	1.35	1.56
February 1-27	9,808	1,962	3,589	2.86	2.87
1903					
July	6,250	725	1,681	1.12	1.29
August	6,140	700	1,686	1 09	1.26
September	6,620	635	1,285	.86	.96
October	995	662	754	.50	.58
November	1,940	725	932	.62	.69
December	1,450	790	981	.65	.75
1904					
August	8,100	630	2,005	1.34	1.54
September	2,145	275	507	.338	.377
October	325	200	261	.174	.201
November	710	275	493	.329	.367
December	2,350	525	987	.658	.759
1905					
January	4,595	770	1,328	.885	1.02
February	9,540	895	2,917	1.94	2.02
March	1,690	895	1,212	.808	.932
April	2,565	730	1,071	.714	.797
May	2,350	580	1,107	.738	.851
June	1,320	385	722	.481	.537
July	4,675	445	1,457	.971	1.12
August	6,530	385	1,273	.849	.979
September	985	220	402	.268	.299
October	790	325	512	.341	.393
November	2,015	415	651	.434	.484
December	11,340	598	3,592	2.39	2.76
The year	11,340	220	1,354	.902	12.19

OCMULGEE RIVER AT MACON.

A station was established at Macon January 21, 1893, by the United States Weather Bureau. Discharge measurements were begun by the United States Geological Survey in 1895, and a wire gage was established on the bridge of the Macon, Dublin and Savannah Railroad and was set on the same datum as the Weather Bureau gage. For a time gage-height records were maintained by the Geological Survey, as the Weather Bureau records were for a part of the year only and were discontinued altogether from June 30, 1897, to June 1, 1899. Since June 1, 1899, the Weather Bureau gage-height records have been taken continuously and have been furnished to the Geological Survey.

The channel is straight and without obstructions, except for one bridge pier. The banks are high and not subject to overflow. The bed of the river is soft and changeable. The station was a fairly good one until the spring of 1902, when the bed of the stream below the station, which is of shifting sand, changed to such an extent as to make the current very sluggish at low stages.

Discharge measurements are made from the downstream side of the Fifth Street Bridge, an iron bridge of two 190-foot spans, located about 500 feet above the railroad bridge. The initial point for soundings is the end of the iron hand rail of the footway at the right bank on the downstream side.

The Weather Bureau gage is a heavy timber bolted to the downstream portion of the right-bank stone pier of the Central of Georgia Railway bridge. October 9, 1905, a standard chain gage was installed on the Fifth Street Bridge, on the outside of the latticed railing of the downstream footway at a point 85 feet from the right-bank end; length of chain, 40.83 feet. Bench marks were established as follows: (1) The top of the iron rim of the sidewalk 80 feet from the initial point for soundings; elevation, 34.42 feet. (2) An aluminum tablet on the wall at the west side of the door of the United States Government building at the Mulberry street front. This bench mark is marked 334 feet and has an elevation of 64.37 feet above zero of the gage.

Discharge measurements of Ocmulgee River at Macon.

Date	Gage height	Discharge
1895	*Feet*	*Sec.-ft.*
October 18	0.39	813
October 23	.20	767
December 13	1.59	1,580
1896		
January 28	5.52	3,436
June 12	— .10	791
June 30	— .82	*a* 442
August 6	2.97	2,045
August 31	— .13	651
October 16	— .61	459
1897		
March 15	16.75	25,530
May 4	4.30	2,750
May 5	3.50	2,275
May 18	2.10	1,592
June 11	2.85	2,111
June 12	1.85	1,479
June 29	.90	1,005
September 23	— .35	504
September 23	— .35	497
November 7	.06	735
December 6	1.20	1,356
1898		
January 7	.42	899
February 10	.60	1,010
March 28	.36	976
March 30	.50	1,028
May 19	— .20	687
June 23	— .34	620
July 26	4.92	3,218
July 27	5.65	3,799
August 29	9.25	6,125
August 30	7.20	4,477
October 19	4.50	3,111
November 5	1.90	1,474
1899		
February 1	9.72	6,302
February 3	13.75	14,950
February 3	13.75	14,780
February 3	12.81	12,690
April 14	4.50	2,587
April 29	5.00	3,094
June 7	1.60	1,015
June 9	1.48	983
June 21	1.22	1,009
August 2	1.98	1,345
September 14	1.70	1,314
September 16	.80	793
October 21	2.30	1,814
December 13	4.50	3,009
December 15	2.50	1,540
1900		
April 13	7.38	4,855
November 20	2.40	1,369
December 6	8.70	5,698
December 21	12.82	9,621
1901	*Feet*	*Sec.-ft.*
January 2	12.82	8,662
February 21	4.35	2,495
April 19	6.50	3,724
May 8	3.75	1,958
November 6	2.15	1,107
November 8	2.15	1,141
1902		
June 26	3.53	1,074
June 25	3.50	689
July 31	4.20	1,126
September 15	3.61	885
September 18	3.30	705
October 23	3.10	829
November 13	3.10	779
November 26	9.29	6,483
November 26	9.59	5,900
December 5	9.00	4,612
1903		
January 26	4.00	1,794
April 2	11.30	7,244
April 4	9.00	5,118
April 21	7.88	4,385
July 14	11.00	7,676
July 14	11.00	7,314
August 24	3.61	1,382
September 30	2.55	1,022
September 30	2.56	1,057
October 15	2.22	926
October 15	2.28	915
November 13	2.84	1,236
December 21	2.88	1,264
December 21	2.95	1,329
1904		
February 17	4.35	2,232
April 11	3.52	1,759
May 24	1.38	703
May 27	1.29	625
July 20	1.87	1,011
August 19	3.31	1,584
September 20 *b*	.30	431
October 6 *c*	— .20	232
November 1 *c*	— .14	302
1905		
March 14	4.88	2,554
June 14	1.22	789
September 13	.71	772
September 28	— .39	321
November 4 *d*	.46	565
1906		
April 14	4.92	1,680
May 18	4.43	920
October 9	5.19	2,170
October 10	5.02	1,810

a Lowest estimated discharge for 1906 was 380 second-feet.
b At shoals above bridge.
c Boat at Second street.
d Made at different section.

Daily gage height, in feet, of Ocmulgee River at Macon.

Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1893 *a*												
1	.....	5.3	12.7	2.4	1.6	2.6	1.0	1.4	9.3	1.3	1.7	2.5
2	.....	4.8	10.0	2.3	1.4	2.4	1.1	1.8	8.7	1.3	1.6	3.0
3	.....	3.9	7.8	2.2	1.8	5.4	1.1	2.2	5.5	1.5	1.6	2.8
4	.....	3.1	12.7	2 1	6.7	6.8	1.8	1.8	3.0	8.0	1.6	2.7
5	.....	2.8	12.2	2.1	3.4	6.7	1.0	2.0	2.8	5.0	1.6	2.5
6	.....	3.4	9.5	2.3	3.1	5.1	1.0	6.2	2.4	3.5	1.6	3.2
7	.....	2.3	7.1	2.5	7.2	5.5	1.0	13.4	2.4	3.0	1.5	2.0
8	.....	1.8	6.5	2.2	4.9	9.7	1.0	9.5	2.3	2.8	1.5	1.8
9	.....	1.6	4.7	2.0	4.9	7.0	1.8	5.0	3.0	2.7	1.5	1.7
10	.....	1.3	8.9	1.8	3.4	3.4	1.2	3.2	4.0	2.6	1.5	1.6
11	.....	2.8	7.8	1.7	2.9	2.5	1.2	2.0	4.1	2.6	1.5	1.5
12	.....	4.6	5.8	1.7	2.2	2.2	1.2	1.8	5.4	2.5	1.5	1.5
13	.....	14.6	5.0	1 6	1.8	2.0	1.1	1 7	9.4	2.5	1.5	1.5
14	.....	13.0	4.1	1.6	1.6	3.0	1.1	1.7	10.9	2.8	1.5	1.5
15	.....	11.2	3.5	1.6	1.3	3.0	1.1	4.2	6.8	2.7	1.5	1.5
16	.....	11.0	2.6	1.7	1.2	3.0	.9	4.0	4.0	2.5	1.5	1.5
17	.....	13.4	3.0	1.6	1.5	2.0	.9	2.0	3.5	2.5	1.5	3.0
18	.....	12.0	2.4	1.4	1.2	1.8	1.0	1.9	2.0	2.5	1.5	2.8
19	.....	11.3	2.2	1.2	1.2	3.0	1.4	1.7	2.0	2.4	1.5	3.5
20	.....	10.6	2.1	2.5	1.0	2.6	1.6	1.6	1.6	2.2	1.5	3.2
21	2.7	6.8	.....	9.0	.8	2.3	1.7	1.6	1.6	2.1	2.0	3.1
22	2.8	4.8	.....	7.4	.7	2.4	5.4	1.4	1.5	2.1	2.8	3.0
23	2.8	3.3	.....	4.3	.6	2.2	2.4	1.3	1.5	2.0	3.0	2.8
24	2.6	5.4	2.9	2.9	.7	2.2	2.2	1.3	1.5	2.0	2.8	2.6
25	4.6	4.0	3.7	2.2	.6	2.2	2.0	1.2	1.4	2 0	2.6	2.4
26	5.0	3.6	5.3	1.8	.6	1.0	1.8	1.2	1.4	2.0	2.4	3.2
27	4.7	3 5	4.0	1·8	.7	1.0	1.8	1.1	1.6	2.0	2.3	2.0
28	5.3	11.9	3.1	1.7	.4	1.0	2.0	1.2	1.5	1.8	2.1	1.9
29	5.8	.....	2.8	1.6	.2	1.1	1.4	1·4	1.4	1.7	2.0	1.8
30	6.3	.....	2.6	1.6	6.1	1.0	1.3	1.4	1.4	1.7	2.0	2.5
31	6.6	.....	2.5	.....	5.6	.....	1.2	2.0	.....	1.7	.....	3.4
1894 *b*												
1	3.2	2.3	10.4	3.0	1.8	1.2	1.8	7.0	3.4	.9	5.0	1.0
2	3.0	2.0	9.1	3.0	1.7	1.2	1.6	6.0	3.2	.9	5.6	1.0
3	2.8	2.0	8.6	2.5	1.5	1.2	1.4	5.8	3.0	.9	7.0	.9
4	2.6	3.0	8.0	2.5	1.5	1.2	1.3	4.8	2.8	.8	6.5	1.0
5	2.3	2.8	4.9	3.0	1.5	1.2	1.2	9.0	2.6	.8	6.0	1.5
6	2.0	2.6	4.2	2.8	1.5	1.1	2.5	14.2	3.0	.8	5.0	1.5
7	1.8	2.4	3.9	2.8	1.5	1.1	3.0	12.2	4.0	.8	4.0	1.4
8	1.6	2.3	3.8	2.5	1.5	1.0	2.8	9.6	6.0	.9	3.0	1.3
9	3.7	2.2	3.7	2.5	1.5	1.0	2.6	6.9	5.5	11.0	2.8	1.3
10	3.3	2.1	3.5	2.5	1.3	1.0	3.0	5.4	5.0	15.1	2.4	2.0
11	4.5	3.0	3.2	5.6	1.3	.9	4.0	4.0	4.8	8.0	2.3	4.0
12	6.0	7.2	7.1	5.2	1.3	.9	3.8	4.0	4.6	6.0	2.1	9.8
13	6.8	10.0	7.9	5.0	1.2	.9	3.4	3.8	5.0	4.5	2.0	13.2
14	5.5	11.0	6.0	4.6	1.5	1.0	3.2	3.6	5.8	4.3	2.0	10.3
15	3.2	13.7	4.0	4.0	3.0	.9	3.0	3.4	4.6	4.1	1.9	8.4
16	3.8	9.8	3.5	3.8	2.5	.9	2.8	3.1	4.3	3.9	1.8	7.2
17	4.2	7.5	4.0	3.5	2.0	.9	3.0	3.0	4.2	3.6	1.7	3.0
18	3.3	6.2	6.0	3.0	1.7	1.0	3.0	3.0	5.0	3.4	1.7	2.5
19	3.0	5.7	5.0	2.8	2.5	.9	7.6	4.0	5.3	3.2	1.5	2.4
20	2.8	5.2	4.6	6.5	2.3	.9	6.8	3.0	11.3	3.1	1.5	2.2
21	3.0	4.9	4.3	6.0	2.0	.8	7.9	4.5	5.5	3.0	1.5	2.1
22	3.2	5.1	4.0	5.8	1.7	2.0	4.0	4.0	3.0	2.8	1.5	2.0
23	3.0	5.2	3.8	5.5	1.5	2.5	3.0	3.8	2.8	2.6	1.5	2.0
24	3.6	5.6	3.5	4.0	1.3	2.6	3.0	3.6	2.6	2.4	1.4	1.9
25	3.2	6.0	3.2	3.7	1.3	3.0	2.6	5.0	2.7	2.3	1.3	1.8
26	3.3	3.9	6.0	3.5	1.3	2.5	2.3	4.8	2.3	2.1	1.3	1.7
27	3.2	10.4	5.6	3.2	1.3	2.0	3.0	4.6	2.2	2.0	1.2	3.0
28	3.0	9.5	4.0	2.0	1.3	1.8	4.0	4.2	2.1	1.8	1.2	4.0
29	2.8	.....	3.5	2.0	1.3	1.6	3.7	4.0	1.0	1.7	1.1	3.9
30	2.7	.....	3.2	2.0	1.3	2.0	4.0	3.8	1.0	1.6	1.0	3.7
31	2.5	.....	3.0	.....	1.2	.....	7.2	3.6	.....	4.0	.....	3.5

a 1893 record from United States Weather Bureau.

b 1894 and 1895 records from United States Weather Bureau.

Daily gage height, in feet, of Ocmulgee River at Macon—Continued.

Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1895.a												
1	3.5	6.0	3.0	4.6	6.0	3.8	10.9	2.8	4.4	b2.0	0.5	0.5
2	3.4	6.0	4.0	4.5	5.5	3.7	10.0	2.8	4.2	1.8	.77	.5
3	3.2	5.8	10.8	4.3	4.0	3.6	7.8	2.8	4.0	1.6	.85	.65
4	3.0	5.3	10.0	4.2	3.8	3.5	11.8	4.0	5.0	1.4	.67	.62
5	3.0	5.1	6.0	4.0	3.7	3.5	10.0	6.0	4.8	1.4	.55	.54
6	2.8	4.0	4.0	4.0	3.6	3.4	9.5	5.8	4.6	1.2	.45	.51
7	2.7	4.0	5.7	3.9	3.6	3.3	9.0	5.6	4.3	1.0	.36	.44
8	2.6	3.9	10.9	11.2	3.6	3.2	13.4	5.4	4.2	1.0	.47	.4
9	3.0	3.7	8.5	11.0	3.6	3.2	10.0	5.3	4.0	1.0	.55	.46
10	15.0	3.6	6.0	8.0	3.5	3.0	7.0	5.0	3.9	.8	.63	.45
11	14.5	3.5	4.0	7.0	5.0	3.0	5.0	4.9	5.0	.6	.65	2.5
12	11.5	3.5	4.0	6.5	5.5	2.9	4.0	4.7	4.8	.7	.6	2.29
13	7.0	4.0	6.0	6.0	5.3	2.9	3.9	4.5	4.5	.65	.77	1.51
14	6.0	4.2	14.5	5.8	5.0	3.0	3.7	4.6	4.3	.4	.94	1.11
15	5.0	4.7	15.8	5.3	4.8	4.0	3.5	7.0	4.1	.3	.72	1.01
16	3.0	4.5	16.4	5.0	4.6	4.0	3.4	9.7	4.0	.2	.65	1.72
17	2.9	4.2	18.4	4.8	4.2	4.5	3.3	12.2	3.9	.2	.57	.58
18	2.7	4.1	16.8	12.5	5.0	4.3	3.2	13.0	3.7	.17	.55	.64
19	2.6	4.0	12.0	10.0	4.2	4.0	3.3	12.0	3.6	.2	.5	.61
20	2.5	3.9	9.0	8.0	4.0	3.9	3.6	9.0	3.5	.18	.5	.59
21	2.2	3.6	11.0	7.0	3.8	3.8	3.5	6.0	3.5	.25	.5	2.02
22	2.1	3.5	9.0	6.0	4.0	3.7	3.4	10.0	3.5	.22	.5	3.1
23	2.0	3.5	8.0	6.5	4.5	4.0	3.3	9.0	3.4	.21	.5	2.68
24	2.0	3.4	7.0	6.0	5.0	3.9	3.3	6.0	3.4	.21	.5	1.7
25	2.0	3.3	6.0	4.8	5.0	3.8	3.2	4.5	3.3	.17	.49	1.48
26	12.5	3.2	5.8	4.7	7.0	3.7	3.1	4.0	3.2	.19	.49	1.01
27	8.0	3.2	5.5	8.1	12.5	3.5	3.0	4.0	3.2	.18	.47	1.0
28	7.0	3.1	5.4	10.9	7.0	3.4	3.0	5.0	3.2	.18	.43	1.2
29	11.0	.....	5.3	10.0	5.0	3.2	2.9	4.0	3.1	.17	.55	1.3
30	11.0	.....	5.0	7.0	4.0	.....	2.9	4.0	3.0	.22	.54	1.35
31	7.0	.....	4.8	.....	3.9	.....	2.9	4.5	.....	.5	.....	4.46
1896.												
1	4.81	3.0	c2.5	c3.1	.89	— .08	— .9	1.02	.11	— .82	.14	9.5
2	3.5	2.9	2.2	3.0	.75	— .11	— 1.0	1.5	.12	— .86	.08	11.08
3	2.2	3.2	2.1	4.6	.63	.56	+ .1	1.82	.11	— .88	.02	12.6
4	1.7	3.0	2.0	3.4	.9	.85	.15	2.22	.28	— .81	10.0	10.2
5	1.42	2.9	2.0	2.9	2.12	1.92	2.0	2.62	.19	— .75	14.2	8.0
6	1.08	13.5	1.9	1.8	2.73	1.52	4.0	3.0	.19	— .79	14.4	6.15
7	.96	10.7	4.0	1.6	1.97	.96	5.3	3.05	.19	— .78	8.8	4.52
8	1.72	7.5	6.0	1.1	1.62	.78	11.0	2.78	.12	— .82	5.4	3.62
9	2.83	13.1	5.0	1.1	.86	.25	20.0	2.41	.08	— .82	3.22	3.0
10	2.77	11.3	4.0	1.4	.61	.01	19.4	1.88	.04	— .82	2.25	2.42
11	2.1	8.7	5.0	1.3	.38	— .05	15.0	1.48	.01	— .73	1.5	1.98
12	1.6	7.0	7.2	1.1	.3	— .1	10.2	.4	— .01	— .65	1.18	1.58
13	1.5	6.3	6.5	1.2	.19	— .17	8.2	.2	— .31	— .75	10.0	1.26
14	1.2	6.5	6.2	1.2	.11	.29	7.1	.13	— .45	— .73	8.1	1.12
15	2.0	5.0	6.0	1.13	.09	.32	7.0	.25	— .8	— .65	5.32	11.7
16	2.5	4.8	6.0	1.12	.07	.2	6.2	1.98	— .63	— .77	1.53	6.0
17	7.2	4.2	5.5	1.09	.05	.25	16.0	.5	— .78	— .8	1.14	4.62
18	5.0	3.4	5.3	1.05	.03	.25	18.2	.6	— .8	— .83	.97	3.94
19	4.5	3.2	5.0	.98	— .05	.3	13.0	.38	— .82	— .85	.85	2.86
20	4.0	3.0	4.9	.94	— .1	.4	7.05	.2	— .91	— .88	.63	2.38
21	3.9	2.9	4.7	.86	—1.	.47	3.8	.11	— .9	— .89	.7	2.0
22	3.7	2.7	4.5	.76	— .15	.56	3.2	.08	— .82	— .9	.62	1.9
23	9.4	2.6	4.2	.71	— .05	.7	3.0	— .06	— .41	— .77	.58	1.76
24	13.8	2.5	5.0	.63	.56	.6	2.9	— .05	— .48	— .4	.58	1.38
25	12.0	2.48	5.0	.63	.5	.3	2.85	.0	— .61	— .52	.51	1.18
26	9.3	2.4	4.8	1.02	.78	— .2	2.7	— .03	— .72	— .25	.51	1.11
27	7.0	2.3	4.7	2.9	.52	— .35	2.4	— .04	— .78	— .08	.5	.96
28	5.8	3.3	4.6	2.32	.34	— .65	2.1	— .07	— .83	— .2	.47	.9
29	5.3	2.8	4.4	1.36	.17	— .75	1.92	— .07	— .91	— .32	.44	.83
30	4.8	.....	4.2	1.02	.12	— .85	1.66	— .09	— .8	— .23	.32	.78
31	3.2	.....	4.1	.....	.12	.....	1.41	— .12	.....	— .18	.....	.7

a 1894 and 1895 records from United States Weather Bureau.
b From October 1 to 23, 1895, estimated by B. M. Hall.
c Gage heights from March 1 to April 14, 1896, supplied from Weather Bureau records.

Daily gage height, in feet, of Ocmulgee River at Macon—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897												
1	0.68	2.0	4.0	5.57	1.95	1.22	1.08	1.08	1.1	— 0.5	— 0.12	1.22
2	.63	5.0	3.7	9.75	1.9	1.18	.75	.84	1.25	— .45	+ .35	.7
3	.6	8.0	3.2	10.05	1.87	3.15	.65	.72	.68	— .5	.48	.6
4	.58	6.0	2.0	10.0	2.15	3.2	2.15	.4	.62	— .54	.35	.62
5	.56	6.0	4.0	15.12	2.23	3.12	2.3	.38	.35	— .61	.25	1.48
6	.54	8.0	3.0	15.15	2.47	3.1	3.8	.42	.28	— .68	.12	1.3
7	.52	6.5	11.6	12.6	3.0	3.0	3.12	1.4	.22	— .52	.1	1.12
8	.5	5.0	12.7	10.48	3.0	2.54	1.62	3.22	.12	— .55	.5	1.48
9	.49	4.75	7.5	10.0	2.91	2.32	1.28	1.1	.07	— .55	.2	.6
10	.49	4.55	5.0	10.8	2.72	2.26	.9	.8	.08	— .58	.2	.52
11	.51	5.0	4.8	7.8	2.57	2.18	3.1	1.6	— .1	+ .12	.3	.43
12	.49	13.5	6.0	6.4	2.45	2.08	3.33	2.0	— .5	.1	.6	.43
13	.48	12.75	17.3	5.0	3.05	2.04	1.5	1.02	— .2	.12	.3	.41
14	.53	7.0	18.0	4.7	3.15	2.01	.9	.7	— .12	.8	— .2	.9
15	.46	5.0	17.7	4.0	3.28	1.89	.3	.4	— .2	.3	— .1	1.46
16	.44	5.0	13.0	4.0	3.0	1.73	.5	.32	— .18	.1	— .18	1.22
17	.44	5.12	9.45	3.7	2.5	1.52	.22	.2	— .22	— .2	— .1	.4
18	1.15	3.0	8.25	3.5	2.22	1.45	.4	2.6	— .33	— .18	— .2	.58
19	1.5	2.75	8.2	3.2	2.09	1.37	1.48	2.28	.6	— .2	— .2	.52
20	2.1	2.62	9.57	3.0	1.84	3.25	4.5	8.18	.2	— .02	— .1	.47
21	1.25	2.65	10.0	2.9	1.81	3.12	9.82	8.8	— .12	.0	— .08	.47
22	7.0	2.71	9.0	2.8	1.78	2.8	8.4	8.1	— .14	.2	— .13	.51
23	5.5	2.0	15.5	2.7	1.71	2.62	5.52	6.48	— .35	.18	— .1	.7
24	3.0	1.9	14.0	2.6	1.68	2.7	3.05	4.7	— .28	.1	— .5	.68
25	2.25	6.0	10.6	2.4	1.6	3.0	1.7	2.1	— .3	.05	— .2	1.02
26	2.0	10.5	8.35	2.3	1.56	3.11	1.11	1.4	— .28	.02	— .1	.89
27	3.0	7.02	7.1	2.22	1.53	2.5	1.32	1.08	— .25	— .12	+ .1	.89
28	3.12	5.0	6.4	2.16	1.5	1.0	3.22	.8	— .32	— .16	.25	1.42
29	1.5	.....	5.57	2.08	1.47	.9	2.1	.58	— .35	— .2	3.1	1.08
30	1.25	.....	5.21	2.0	1.36	1.5	1.76	.52	— .42	— .2	1.4	.75
31	1.2	.....	5.2	.....	1.28	.....	1.12	.4	.....	— .2	.....	.65
1898												
1	.5	1.1	.25	1.75	1.87	— .53	— .82	5.11	4.96	.75	2.54	4.15
2	.45	1.01	.3	.5	1.1	— .48	— .87	3.70	14.48	.72	2.19	3.51
3	.38	1.0	.3	.48	.92	— .52	— .35	2.11	16.6	7.72	2.08	9.4
4	.32	.7	1.08	.6	.78	— .58	— .5	1.85	18.22	16.85	2.0	13.6
5	.32	.69	3.35	4.33	.6	— .7	— .78	10.5	15.76	17.32	1.85	9.72
6	.38	.71	3.3	12.1	.5	— .78	— .9	10.76	14.72	15.15	1.92	8.1
7	.45	.77	1.45	10.13	.58	— .82	+ 2.12	10.79	11.0	13.35	2.03	6.61
8	.43	.75	1.35	7.9	.58	— .87	1.35	8.72	9.4	11.75	2.03	6.08
9	.41	.67	1.1	4.37	.47	— .8	.93	4.91	6.9	9.21	1.9	5.21
10	.43	.6	.8	3.92	.3	— .83	3.48	2.7	6.11	7.35	1.83	5.8
11	.58	.6	.75	2.9	.21	— .94	3.62	6.31	4.0	5.02	2.91	4.21
12	.75	.52	.6	2.74	.18	— .95	1.22	12.7	3.65	4.1	3.37	3.64
13	1.63	.5	.6	2.1	.2	— .96	.9	13.0	3.8	3.5	4.22	3.6
14	1.3	.48	.6	1.75	.18	+ .1	1.2	12.97	2.8	3.07	6.41	3.42
15	.9	.36	2.0	1.6	.1	.53	3.2	9.12	2.5	2.85	6.23	3.21
16	.94	.32	3.92	1.5	.04	— .1	3.8	6.52	1.93	2.56	14.1	2.91
17	.88	.25	3.0	1.2	— .08	— .1	2.67	4.92	1.89	2.3	10.21	2.8
18	.76	.4	2.02	.98	— .15	— .38	1.6	5.41	1.72	4.12	9.27	2.77
19	.6	.63	1.49	.85	— .2	+ .11	.7	2.7	1.56	4.38	12.31	3.11
20	.66	.72	1.22	1.02	— .1	.83	.2	4.1	1.3	4.18	9.02	3.0
21	1.45	.64	.95	1.6	— .15	.6	— .11	2.1	1.22	5.21	6.95	4.1
22	1.85	.5	.85	1.32	+ .05	2.21	— .28	1.94	1.48	6.9	5.5	5.67
23	1.56	.4	.75	1.3	.11	.2	— .32	1.9	1.42	5.23	5.15	5.6
24	1.1	.33	.5	7.95	.91	— .41	+ 3.32	1.42	1.35	4.17	4.31	5.52
25	1.22	.29	.5	8.9	1.52	— .5	2.51	.9	1.31	3.94	4.0	4.91
26	2.7	.25	.45	6.12	1.46	— .53	5.35	.5	1.28	3.2	4.5	4.6
27	5.37	.23	.39	3.15	1.1	+ .3	3.3	4.25	1.12	2.91	3.18	4.07
28	4.31	.22	.36	2.9	.32	.51	3.1	7.21	.98	2.43	2.92	3.8
29	2.5	.....	.39	2.55	— .11	— .42	3.14	9.45	.83	2.32	3.5	3.3
30	2.08	.....	.5	2.05	— .3	— .65	4.3	7.53	.77	2.9	3.31	3.21
31	1.62	.....	1.5	.....	— .36	.....	9.02	5.08	.....	2.71	.....	3.1
1899												
1	4.42	9.6	14.72	11.3	4.05	4.4	1.5	2.5	2.6	.3	.8	1.7
2	6.6	8.41	11.14	8.71	3.8	2.8	1.5	2.1	1.8	.3	.6	1.5
3	5.96	13.7	9.11	7.97	3.6	2.6	1.2	1.4	2.0	.3	.6	1.2
4	5.21	11.98	8.32	7.86	3.5	2.6	.9	1.4	1.8	.4	.5	2.1
5	3.7	9 94	8.11	8.11	3.45	1.9	.9	1.2	1.8	.5	.5	1.9

Daily gage height, in feet, of Ocmulgee River at Macon—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1899												
6	4.12	10.8	7.62	7.85	8.1	1.8	1.0	1.0	1.1	2.8	0.5	1.5
7	15.2	15.83	6.81	6.89	6.72	1.6	1.1	.8	.7	2.0	.4	1.3
8	12.65	13.42	6.72	6.5	5.3	1.6	1.5	.7	.7	10.0	.4	1.1
9	10.21	12.13	6.4	5.97	3.8	1.6	2.0	.6	.5	6.4	.4	1.1
10	9.23	10.8	6.11	5.63	3.55	1.4	1.3	.5	.4	3.2	.4	1.0
11	12.14	9.78	5.81	5.42	3.28	1.6	1.1	2.1	2.2	2.2	.4	1.1
12	11.37	8.21	5.74	5.01	3.1	1.5	.9	1.0	2.5	1.8	.5	3.7
13	9.38	7.6	5.69	4.71	2.96	2.3	.8	1.2	2.2	1.3	.5	4.7
14	8.96	7.13	5.58	4.58	2.9	2.9	.8	.8	1.7	1.0	.5	3.9
15	8.21	6.1	5.51	4.4	2.82	2.2	.7	.7	.9	1.0	.8	2.6
16	9.67	12.3	8.51	5.01	2.69	1.7	.6	.7	.6	.9	.7	2.0
17	12.91	11.98	7.21	4.42	2.52	1.5	.6	.6	.6	.8	.7	1.8
18	10.87	11.12	9.38	4.33	2.45	2.3	.5	.6	.5	.8	.7	1.5
19	9.34	9.76	12.94	10.38	2.33	1.4	.7	.5	.5	.8	.6	1.4
20	5.91	8.32	10.72	7.82	2.2	1.3	.9	.4	.4	2.0	.6	1.4
21	5.11	8.27	9.42	5.52	2.18	1.3	1.0	.4	.3	2.8	.6	1.3
22	5.42	8.16	8.11	4.72	2.48	1.2	.8	a.0	.3	3.2	.5	1.3
23	5.1	8.1	6.42	4.61	3.67	1.0	1.3	3.3	.3	2.4	.6	1.4
24	5.37	7.13	8.65	5.48	3.35	.9	3.2	3.1	.2	1.6	1.0	6.4
25	5.31	6.28	8.85	11.37	3.01	.9	2.0	2.1	.2	1.2	1.4	5.9
26	5.01	6.13	6.93	12.41	2.4	1.2	2.0	1.2	.4	1.0	4.4	5.2
27	4.71	12.13	6.01	8.22	2.18	3.2	2.3	.8	.4	.8	5.3	3.5
28	4.69	14.91	7.87	5.84	2.12	3.2	4.3	3.0	.4	.7	4.2	2.6
29	5.03	.....	7.3	5.16	2.06	1.6	5.1	2.3	.3	1.4	3.1	2.3
30	4.9	.....	6.91	4.71	2.03	1.7	4.2	1.8	.3	1.0	2.0	2.1
31	5.07	.....	6.28	.....	2.15	.....	3.2	2.4	.....	1.1	.....	1.6
1900												
1	1.6	1.6	9.2	5.2	6.1	2.9	9.6	6.1	10.5	1.8	2.0	2.7
2	1.5	1.5	9.4	4.9	7.3	2.9	8.3	4.4	5.8	1.8	3.2	2.6
3	1.2	1.5	7.7	4.8	8.6	3.2	13.3	4.2	5.0	1.7	2.8	2.5
4	1.2	1.5	6.2	4.6	8.0	3.8	11.2	3.7	3.5	2.2	12.3	8.4
5	1.2	2.8	5.8	4.5	7.3	4.6	8.3	3.4	2.7	4.1	8.2	11.5
6	1.5	2.9	5.5	4.5	6.4	6.4	6.4	3.1	2.5	3.6	4.9	9.3
7	1.4	2.5	5.3	4.3	5.6	8.0	5.5	3.0	2.4	5.0	3.6	6.4
8	1.4	2.3	7.0	4.3	4.4	8.9	4.9	2.8	2.1	4.6	3.2	4.8
9	1.3	3.2	7.8	4.1	4.1	7.7	5.0	2.6	2.2	2.7	2.8	4.2
10	1.3	8.3	9.7	4.1	4.1	6.6	4.5	2.5	2.1	3.2	2.6	3.7
11	1.9	16.1	8.1	4.3	4.1	5.5	4.3	2.4	2.0	2.6	2.5	3.3
12	2.9	18.7	6.4	7.0	4.0	5.2	4.8	2.3	2.0	2.5	2.4	3.2
13	4.2	19.0	5.8	7.6	3.9	3.8	5.3	2.4	1.8	2.4	2.3	3.0
14	3.7	21.7	5.3	6.1	3.8	3.7	4.9	2.6	1.7	2.7	2.2	8.5
15	2.6	19.5	5.3	5.3	3.7	3.2	4.5	2.4	4.7	2.6	2.2	12.5
16	2.2	15.5	10.4	4.8	3.4	8.6	4.0	2.4	13.3	2.4	2.2	8.5
17	2.0	11.4	7.3	4.3	3.4	8.8	3.9	2.6	10.5	2.2	2.1	4.6
18	2.0	8.5	5.8	5.0	3.3	10.9	3.7	2.7	6.0	2.1	2.1	4.4
19	2.9	7.4	5.2	18.0	4.1	11.2	3.5	2.7	4.0	2.0	2.1	3.9
20	3.8	6.8	8.0	15.6	4.0	8.0	3.5	2.6	3.3	1.9	2.0	4.0
21	4.6	8.2	7.7	13.9	3.7	5.3	3.4	2.4	2.7	1.9	2.4	12.8
22	3.9	8.9	6.6	16.0	3.5	4.0	3.3	2.3	2.5	1.9	2.4	12.1
23	3.1	7.7	5.6	13.9	3.3	4.0	3.4	2.2	2.4	2.1	2.5	8.6
24	2.7	6.4	7.3	13.2	4.6	16.0	3.9	3.6	2.3	8.3	2.7	6.5
25	2.5	7.3	7.9	13.0	4.8	20.2	3.4	4.1	2.3	4.2	2.5	5.5
26	2.2	6.5	10.5	12.4	4.2	20.0	3.3	4.3	2.2	3.7	7.1	4.8
27	2.0	5.9	10.9	9.8	3.8	16.4	4.2	3.8	2.0	2.9	5.5	4.1
28	2.0	5.5	7.8	7.6	3.3	14.0	4.5	2.7	2.0	2.5	4.3	3.9
29	1.9	.....	7.4	7.0	3.1	12.7	5.6	2.4	2.0	2.4	3.2	3.7
30	1.7	.....	6.6	6.3	3.0	10.4	6.3	2.3	1.9	2.3	2.9	3.8
31	1.6	.....	5.8	.....	2.9	.....	8.0	3.8	.....	2.1	.....	7.5
1901												
1	11.7	4.7	4.1	14.5	4.2	9.9	5.3	3.8	5.4	3.4	1.7	1.9
2	12.3	5.0	4.0	9.5	4.1	8.5	5.5	3.0	7.5	3.3	1.7	1.9
3	13.7	4.5	3.9	18.8	4.0	6.2	5.7	2.5	4.8	5.8	1.7	2.0
4	11.9	14.9	3.8	17.3	3.9	5.4	3.8	2.2	4.4	5.6	1.7	1.9
5	9.5	15.9	3.8	13.1	3.9	5.1	3.2	2.2	3.4	3.9	2.0	3.2

a Mud around gage, August 22, 1899.

UNIVERSITY OF CALIFORNIA

Daily gage height, in feet, of Ocmulgee River at Macon—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1901												
6	7.7	13.7	3.7	10.5	4.0	4.3	3.0	3.8	3.1	3.3	2.0	2.7
7	6.5	10.1	3.5	9.0	3.9	4.7	2.9	9.4	3.0	3.0	2.1	2.4
8	5.7	8.7	3.4	7.7	3.8	6.8	3.2	7.4	2.8	2.8	2.0	2.4
9	5.1	12.1	3.4	6.7	3.7	5.3	3.1	4.4	2.6	2.7	1.9	2.3
10	4.8	11.3	3.5	6.1	3.6	4.0	3.0	3.0	2.5	2.6	2.0	2.4
11	4.6	9.5	5.8	5.7	3.5	3.5	3.8	3.8	2.4	2.6	2.0	3.1
12	5.8	7.9	6.9	5.4	3.4	3.3	2.9	8.2	2.4	2.5	1.9	2.9
13	12.6	7.4	5.4	5.6	3.4	3.8	2.7	5.0	2.3	3.0	1.9	2.5
14	12.0	6.5	5.0	8.5	3.5	6.0	2.6	4.4	2.6	2.9	2.0	2.3
15	8.6	5.8	4.2	10.4	3.5	6.9	2.5	3.4	3.2	2.8	2.1	13.7
16	7.2	5.4	3.8	10.2	3.3	9.6	3.7	5.9	2.9	2.6	2.0	11.9
17	11.4	5.1	3.6	8.3	3.2	8.8	4.0	14.6	5.0	2.5	1.9	7.5
18	11.2	4.9	3.4	6.8	3.1	7.5	3.5	11.6	17.7	2.3	1.9	4.7
19	7.8	4.7	3.4	6.5	3.0	9.2	4.0	7.4	16.2	2.2	2.0	3.7
20	6.1	4.6	3.3	7.7	3.3	6.6	15.4	7.0	12.0	2.0	2.2	3.2
21	4.3	4.4	3.7	7.8	5.5	5.2	8.5	7.8	7.8	1.9	2.4	2.7
22	5.0	4.2	3.9	6.5	12.0	4.6	5.5	5.2	6.0	2.1	2.5	2.1
23	4.5	4.2	3.6	5.8	13.9	5.1	4.0	10.0	4.7	2.0	2.3	2.3
24	4.4	4.4	3.8	5.5	9.2	5.3	3.5	14.4	3.9	2.0	2.2	3.1
25	4.8	4.5	4.4	5.2	5.7	4.7	2.8	12.0	3.5	1.9	2.2	3.4
26	5.1	4.6	16.1	5.0	5.0	3.3	2.6	7.2	3.3	1.9	2.1	3.4
27	4.5	4.6	16.1	4.8	5.3	5.3	2.5	4.8	3.1	1.9	2.0	3.7
28	5.0	4.4	13.2	4.6	4.7	5.1	2.9	10.0	3.1	1.8	2.0	4.9
29	5.1	.....	9.4	4.5	4.1	4.3	3.1	10.4	3.7	1.8	1.9	13.6
30	4.5	.....	7.2	4.3	3.8	5.4	3.1	9.6	3.9	1.7	1.9	17.1
31	5.3	.....	15.8	.....	4.7	.....	3.0	7.4	.....	1.7	.....	17.9
1902												
1	15.7	11.5	22.8	12.8	5.8	4.2	3.3	3.9	4.0	5.0	3.5	8.5
2	11.0	18.0	20.9	10.4	5.7	4.1	3.2	3.8	3.6	5.6	3.3	7.3
3	8.1	19.2	17.3	8.8	5.7	4.5	3.3	3.7	3.5	4.5	3.3	13.3
4	6.3	18.5	13.0	8.5	5.8	4.3	3.1	5.5	3.3	3.9	3.2	11.9
5	5.2	15.0	11.1	8.2	5.5	4.1	3.3	5.9	3.4	4.3	3.2	9.5
6	4.7	10.6	10.1	7.9	5.4	4.0	3.3	9.5	3.4	5.2	3.3	7.0
7	4.4	8.4	9.4	7.6	5.3	4.0	3.3	5.5	3.4	4.8	3.4	5.9
8	4.2	7.2	8.7	10.5	5.2	6.2	3.2	4.6	3.3	4.2	3.7	5.2
9	4.0	6.4	8.4	10.2	5.2	6.1	3.3	4.0	3.4	3.8	3.5	4.7
10	3.9	5.8	8.2	9.8	5.5	5.0	3.2	3.8	3.4	3.7	3.4	4.2
11	3.7	5.5	7.9	7.7	5.5	4.6	3.2	3.7	3.8	3.5	3.3	3.8
12	3.6	5.3	7.7	7.3	5.3	4.2	3.3	3.4	3.6	3.9	3.3	4.0
13	3.5	5.0	7.5	7.1	5.2	4.1	3.2	4.6	3.5	4.6	3.2	5.2
14	3.3	4.9	8.4	6.9	5.1	4.0	3.2	4.0	3.3	4.6	3.1	4.0
15	3.1	5.1	9.4	6.9	5.0	4.0	5.2	3.8	4.2	4.3	3.2	4.3
16	3.1	5.5	10.7	6.9	5.4	5.8	4.1	4.1	3.8	3.9	3.1	4.1
17	3.2	5.7	18.6	6.8	6.4	5.0	4.0	5.9	3.5	3.6	3.2	3.6
18	3.1	5.4	16.8	11.1	5.7	4.5	3.8	4.1	3.3	3.5	3.5	6.8
19	3.1	5.3	13.4	9.0	5.7	4.8	3.6	3.4	3.3	3.4	4.8	5.8
20	3.2	5.2	11.0	7.6	5.7	4.4	3.4	3.7	3.2	3.4	4.6	4.8
21	3.4	5.9	9.4	7.1	5.2	4.2	3.4	3.4	4.2	3.3	3.9	6.8
22	3.9	6.3	8.9	7.0	5.0	4.0	3.4	3.3	4.1	3.5	3.6	6.6
23	4.2	5.9	8.6	6.6	4.8	3.8	3.8	3.7	3.7	3.2	3.5	6.0
24	3.7	5.3	8.2	6.4	4.7	3.7	3.5	3.6	3.6	3.2	3.3	5.3
25	3.4	7.2	9.1	6.3	4.6	3.7	3.6	3.3	3.4	3.1	3.2	4.8
26	3.4	8.1	8.9	6.2	4.6	3.6	3.5	3.2	6.8	3.1	8.8	4.3
27	3.4	8.4	8.3	6.2	4.5	3.6	4.8	3.2	5.8	3.8	8.5	4.2
28	3.4	19.9	10.0	6.1	4.4	3.5	3.7	3.3	5.3	5.4	5.7	4.0
29	3.3	.....	16.2	5.9	4.3	3.4	4.9	4.3	5.4	4.7	4.4	3.8
30	3.9	.....	17.3	5.8	4.2	3.4	4.7	4.6	5.2	3.9	4.1	4.0
31	4.4	.....	14.6	.....	4.2	.....	4.2	4.7	.....	3.6	.....	4.8
1903												
1	4.8	4.2	14.3	14.3	5.3	7.2	4.4	4.1	2.9	2.3	2.2	2.5
2	4.5	4.0	12.3	11.4	5.1	13.5	4.3	3.5	2.7	2.3	2.3	2.4
3	4.7	4.0	9.3	9.9	5.2	11.5	4.4	3.7	2.6	2.4	2.5	2.3
4	4.7	4.3	8.3	9.0	6.1	9.4	4.6	5.6	2.4	2.4	2.8	2.3
5	5.2	5.7	9.5	8.9	6.6	12.9	4.9	6.3	2.0	2.4	3.5	2.4
6	4.9	7.8	10.0	8.1	6.4	17.4	4.4	7.4	2.5	2.5	4.1	2.7
7	4.6	6.7	8.8	8.3	5.8	12.9	4.4	5.5	2.3	2.5	3.2	2.8
8	4.4	20.0	7.8	7.7	7.0	12.3	4.9	3.9	2.2	2.5	3.0	2.8
9	4.2	20.7	7.7	12.2	6.5	8.8	6.0	3.5	2.2	2.6	2.9	2.9
10	4.0	18.4	12.6	13.0	6.0	8.2	5.6	3.4	2.1	2.6	2.6	3.3

Daily gage height, in feet, of Ocmulgee River at Macon—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903.												
11	3.9	15.75	11.2	10.0	5.5	6.9	4.5	3.2	2.1	2.5	2.6	3.3
12	4.9	17.6	11.4	8.9	5.3	6.4	7.3	3.1	2.1	2.4	2.5	3.2
13	5.4	16.3	11.2	7.7	5.1	5.8	6.6	3.5	2.2	2.3	2.9	2.9
14	4.9	12.9	9.3	8.9	5.3	5.3	10.2	3.6	2.2	2.4	2.8	2.9
15	4.4	10.6	8.1	8.8	7.2	5.1	11.0	5.9	9.9	2.4	2.7	3.2
16	4.2	10.2	9.2	7.7	11.0	4.7	7.4	7.3	14.7	2.3	2.8	2.9
17	4.2	16.3	9.7	6.9	8.2	4.5	5.3	7.3	13.0	2.9	2.7	2.7
18	4.1	16.5	7.5	6.6	6.3	4.4	4.6	5.7	8.3	4.9	2.9	2.7
19	3.9	14.1	6.9	6.3	5.7	4.4	4.3	9.8	5.5	3.5	2.9	2.6
20	3.8	11.1	6.5	6.2	5.2	4.2	4.2	11.2	4.4	3.1	3.1	2.4
21	3.8	9.4	6.4	8.2	5.1	4.1	3.9	5.7	3.8	2.9	3.0	2.9
22	3.8	7.9	11.5	7.3	4.9	4.4	3.9	5.1	3.6	2.7	2.9	3.2
23	3.8	7.3	15.2	6.2	4.7	4.5	3.6	4.1	3.3	2.4	2.7	3.1
24	3.8	6.9	18.3	5.8	4.9	4.4	3.5	4.3	3.2	2.4	2.8	2.9
25	4.0	6.3	18.3	5.7	4.5	4.2	3.4	4.0	3.2	2.4	2.8	2.6
26	4.1	6.2	15.6	6.6	4.3	4.0	3.4	3.2	3.1	2.3	2.7	3.7
27	4.8	6.1	11.3	6.5	4.2	4.2	3.3	3.1	3.0	2.3	2.6	3.4
28	5.1	8.0	9.2	5.9	4.7	5.3	3.2	2.9	3.0	2.3	2.6	3.4
29	5.1	.....	8.3	5.6	5.3	6.7	3.4	2.8	2.7	2.3	2.6	3.2
30	5.3	.....	14.5	5.4	4.7	5.4	3.2	2.7	2.5	2.3	2.5	2.8
31	4.7	.....	16.1	.....	4.6	.....	5.3	2.7	.....	2.3	.....	2.7
1904.												
1	2.5	3.5	4.2	3.1	2.8	3.9	1.9	3.5	1.8	.0	.0	1.0
2	2.5	3.5	4.1	3.0	2.8	4.8	1.9	2.3	1.7	— .3	— .1	1.1
3	2.1	3.6	4.2	3.1	2.8	3.4	2.0	2.9	1.4	a— .5	.2	2.4
4	2.8	3.3	4.4	3.0	2.7	3.3	1.2	4.4	1.0	a— .8	.7	1.8
5	2.7	3.2	4.2	2.9	2.7	1.9	.9	5.3	1.0	a—1.0	1.6	2.0
6	2.6	3.1	3.8	2.8	2.6	1.7	1.7	3.4	4.7	— .2	1.5	5.1
7	2.4	3.2	6.1	3.0	2.5	1.5	1.2	2.4	3.0	.2	1.4	6.0
8	2.4	8.3	7.3	3.2	2.6	2.0	1.2	10.0	2.0	.1	.9	4.4
9	2.6	7.5	7.1	5.7	3.6	4.3	1.0	11.1	1.6	.0	.9	3.3
10	2.7	6.5	5.7	5.1	3.3	3.3	.7	15.4	1.5	— .1	.8	2.5
11	3.1	10.3	5.1	3.9	3.7	2.0	1.0	13.0	1.4	.0	.8	2.3
12	3.3	9.7	4.6	3.1	3.0	1.5	1.0	9.7	1.3	— .1	.5	2.0
13	3.2	7.9	4.2	3.2	2.8	1.3	1.9	6.7	1.3	— .1	.9	2.0
14	3.2	6.1	4.1	3.1	2.7	1.1	1.7	3.7	1.1	.1	1.3	1.9
15	3.3	5.2	4.2	3.0	2.6	1.0	1.7	6.7	1.0	— .1	1.8	1.9
16	3.2	4.8	5.0	2.9	2.5	1.0	1.2	5.4	1.0	— .2	1.8	2.0
17	3.5	4.5	4.3	3.0	2.4	.9	1.0	5.3	.9	— .3	1.3	1.9
18	4.5	4.2	3.9	2.8	2.3	.9	1.1	4.9	.8	— .1	1.0	2.0
19	4.2	3.8	3.7	2.8	2.2	1.1	1.4	3.5	.8	— .3	.9	1.8
20	3.5	4.1	3.7	3.0	2.1	.9	1.9	2.5	.7	— .3	1.0	1.8
21	3.2	5.8	3.6	3.0	2.0	.8	1.3	2.0	.5	.0	.9	1.7
22	3.1	7.0	3.4	2.9	1.9	4.3	1.3	1.8	1.7	— .3	.9	1.5
23	12.9	10.3	3.6	2.9	1.8	3.4	1.1	1.7	.6	— .2	1.0	1.4
24	10.2	9.3	3.9	2.9	1.7	2.0	1.4	1.7	.9	.4	1.5	1.4
25	6.9	7.2	4.0	2.9	1.6	1.4	2.7	7.0	.6	.2	2.1	1.5
26	5.0	5.4	3.7	2.8	1.6	1.0	2.2	5.3	.4	.3	1.8	1.7
27	4.3	5.2	3.6	2.8	1.5	.8	1.2	6.3	.3	.3	1.3	2.0
28	3.8	4.7	3.8	3.0	1.4	.8	1.1	4.8	.3	.2	1.2	6.4
29	3.7	4.3	4.3	3.0	1.3	1.3	.8	3.3	.2	.0	1.0	5.5
30	3.6	.....	3.2	2.9	1.3	3.0	1.7	2.9	.1	.1	1.0	4.7
31	3.5	.....	3.0	.....	1.8	.....	4.6	2.0	.....	— .1	.....	3.3
1905.												
1	2.7	2.1	4.2	2.2	2.9	2.1	3.0	.8	.7	.6	.7	.8
2	2.3	2.1	3.9	2.2	2.4	1.8	6.7	.7	1.7	1.0	.6	.8
3	2.4	2.0	3.6	2.3	2.7	1.6	7.9	.8	2.4	1.2	.4	1.7
4	2.4	1.9	3.4	2.2	4.4	2.3	7.5	.6	2.2	2.9	.43	13.0
5	2.1	2.0	3.3	2.4	4.6	2.0	5.0	.4	2.2	2.0	.44	15.0
6	2.0	2.3	3.2	3.3	4.4	1.6	3.5	.0	1.5	1.5	.37	10.4
7	2.2	3.2	3.0	3.3	3.6	1.4	3.9	— .1	1.3	1.15	.32	6.7
8	2.7	6.2	3.0	3.0	3.8	1.3	4.5	— .1	.8	.75	.65	5.1
9	3.0	13.3	3.0	2.7	3.4	1.1	3.9	2.2	.4	.3	.62	6.9
10	2.4	11.4	3.7	3.3	3.0	1.0	3.2	4.4	.2	.27	.85	11.6

a See footnote to estimated monthly discharge, 1904.

Daily gage height, in feet, of Ocmulgee River at Macon—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
11	2.1	10.8	3.4	5.3	2.7	0.8	3.7	3.5	— .1	0.24	3.3	11.2
12	1.9	10.7	4.6	4.3	2.3	.7	6.7	3.4	— .2	.8	4.2	8.3
13	5.3	16.4	5.7	6.3	2.0	.9	6.6	10.6	— .3	1.3	3.4	6.7
14	9.0	15.4	5.0	4.6	1.8	1.7	8.2	7.4	— .6	1.5	2.3	4.9
15	7.9	12.7	4.4	3.0	1.7	1.1	6.7	6.2	.2	1.2	1.85	6.6
16	5.0	10.2	3.9	4.1	2.4	1.8	3.3	6.3	.2	.7	1.7	5.9
17	4.1	7.7	3.5	3.3	4.0	3.8	2.7	4.2	.0	.45	1.35	5.4
18	3.8	6.4	3.3	3.1	2.5	2.2	2.3	3.5	— .2	.51	1.2	4.6
19	3.1	5.8	3.0	2.7	2.2	1.7	1.7	3.2	— .3	.43	1.12	4.1
20	3.0	5.3	3.0	2.4	1.8	1.4	1.6	1.9	— .4	.36	1.1	4.9
21	2.9	8.0	5.6	2.2	1.7	1.1	1.8	1.5	— .5	.34	.6	16.7
22	2.9	9.6	4.3	2.2	1.6	1.1	1.8	1.3	— .5	.26	.6	15.1
23	2.8	9.1	4.2	2.1	4.0	4.8	1.3	1.2	— .5	.16	.8	12.4
24	2.5	7.3	3.5	2.1	3.8	3.9	1.2	2.3	— .6	.18	.7	10.5
25	2.4	6.1	3.4	2.1	4.9	3.2	.9	2.9	— .3	.12	.6	9.4
26	2.2	5.6	3.3	2.0	4.4	2.3	1.2	2.3	— .2	.9	.6	7.9
27	1.9	5.0	3.2	2.0	3.5	1.8	2.1	1.5	— .3	1.3	.7	5.8
28	1.7	4.5	2.9	2.0	3.0	1.4	1.7	1.2	— .4	1.1	.9	4.7
29	2.0	.....	2.7	2.0	2.9	2.5	1.2	1.1	— .3	1.25	1.1	6.4
30	2.0	.....	2.5	2.2	2.9	2.5	1.1	.9	— .2	1.1	.9	5.8
31	2.0	.....	2.4	.....	2.5	.....	1.0	1.4	.....	.74	.....	4.8
1906												
1	5.2	6.2	3.5	9.2	3.2	2.2	3.3	3.2	4.7	4.8	2.9	2.8
2	4.8	6.0	3.4	8.0	3.1	2.1	2.4	6.5	6.7	16.6	2.9	2.7
3	5.0	5.4	4.2	6.9	3.0	2.0	2.5	5.6	8.5	17.6	2.9	2.8
4	16.1	5.3	4.2	6.1	3.3	3.4	2.8	4.9	6.9	18.2	2.8	2.9
5	15.3	4.9	4.5	5.7	3.4	5.2	2.9	8.1	4.5	17.6	2.9	2.9
6	14.2	4.8	4.1	5.4	3.4	3.0	2.6	7.1	3.7	12.9	2.9	2.8
7	10.5	4.5	3.8	5.2	3.5	2.4	2.4	6.6	3.5	13.3	2.9	2.9
8	9.9	4.9	4.1	5.0	4.8	2.1	2.3	9.2	3.0	9.3	2.8	3.0
9	7.3	6.5	9.7	4.9	4.8	2.0	3.5	5.0	2.5	7.2	2.8	3.1
10	6.4	5.6	11.0	5.5	4.0	2.1	6.6	3.8	2.4	6.0	2.8	2.9
11	6.4	5.3	8.5	6.3	3.4	2.1	4.9	3.5	2.7	5.1	2.7	2.9
12	5.9	5.0	6.9	5.7	3.2	2.0	3.6	3.0	2.6	4.5	2.8	4.0
13	7.0	5.0	6.2	5.1	3.2	13.5	3.3	3.2	3.2	4.2	2.9	4.2
14	6.6	4.8	5.2	4.8	3.1	18.0	2.9	4.4	5.0	4.1	2.9	3.6
15	6.3	4.5	8.7	5.0	2.9	17.2	4.3	11.2	3.2	3.8	3.2	3.4
16	5.4	4.2	14.1	4.8	2.8	17.0	4.5	9.5	2.6	3.8	3.6	3.2
17	5.1	4.1	14.5	4.5	2.7	13.4	4.5	5.3	2.3	3.6	3.5	3.0
18	5.0	4.1	11.8	4.2	2.6	12.9	4.8	4.2	2.2	3.6	3.5	3.4
19	4.8	4.0	9.5	4.1	2.5	10.4	7.7	4.1	6.2	3.8	5.5	4.1
20	4.7	3.9	16.3	4.0	2.5	8.0	10.5	3.3	7.2	4.6	5.4	6.1
21	4.7	4.1	17.0	3.9	2.3	5.9	9.2	3.2	8.1	4.5	4.8	5.6
22	5.2	4.9	15.9	3.9	2.3	5.1	6.3	4.4	9.8	3.8	4.1	5.2
23	19.9	4.0	12.5	3.8	2.4	5.1	7.9	7.3	7.6	3.7	3.9	4.5
24	14.3	3.9	9.9	3.5	2.4	4.0	10.0	7.8	7.4	3.5	3.6	3.9
25	11.3	3.9	8.2	3.3	2.2	3.5	9.0	5.1	8.5	3.5	3.4	3.6
26	11.9	3.9	7.0	3.3	2.4	3.2	6.4	3.8	8.2	3.4	3.1	3.3
27	12.0	3.8	6.3	3.3	2.2	3.2	5.9	4.6	5.5	3.2	3.1	3.2
28	11.0	3.6	11.0	3.2	3.2	3.1	4.2	5.6	6.7	3.1	3.0	3.1
29	9.6	.....	11.9	3.3	3.2	2.8	3.7	9.8	5.9	3.0	2.9	3.6
30	8.5	.....	10.3	3.3	2.9	2.6	3.3	8.5	5.4	2.9	2.8	5.1
31	7.2	.....	10.7	.....	2.5	.....	9.2	7.7	.....	2.9	.....	6.8

Rating tables for Ocmulgee River at Macon.

JANUARY 1, 1893, TO DECEMBER 31, 1896.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
—0.90	380	1.20	1,285	3.40	2,240	7.40	5,080
— .80	426	1.30	1,328	3.60	2,330	7.60	5,290
— .70	469	1.40	1,371	3.80	2,420	7.80	5,520
— .60	512	1.50	1,414	4.00	2,525	8.00	5,750
— .50	555	1.60	1,457	4.20	2,630	8.50	6,500
— .40	598	1.70	1,500	4.40	2,740	9.00	7,250
— .30	641	1.80	1,543	4.60	2,860	9.50	7,925
— .20	684	1.90	1,586	4.80	2,970	10.00	8,625
— .10	727	2.00	1,629	5.00	3,090	10.50	9,450
.00	770	2.10	1,672	5.20	3,210	11.00	10,300
+ .10	813	2.20	1,715	5.40	3,340	11.50	11,125
.20	855	2.30	1,758	5.60	3,460	12.00	11,975
.30	898	2.40	1,801	5.80	3,600	13.00	14,000
.40	941	2.50	1,844	6.00	3,750	14.00	16,750
.50	984	2.60	1,887	6.20	3,900	15.00	19,750
.60	1,027	2.70	1,920	6.40	4,070	16.00	23,000
.70	1,070	2.80	1,963	6.60	4,240	17.00	26,200
.80	1,113	2.90	2,006	6.80	4,430	18.00	29,375
.90	1,156	3.00	2,050	7.00	4,600	19.00	32,750
1.00	1,200	3.20	2,150	7.20	4,830	20.00	36,200
1.10	1,242						

JANUARY 1 TO DECEMBER 31, 1897.[a]

— .60	450	2.00	1,604	5.40	3,351	8.80	6,120
— .50	491	2.20	1,698	5.60	3,474	9.00	6,430
— .40	516	2.40	1,793	5.80	3,598	9.50	7,450
— .30	554	2.60	1,888	6.00	3,722	10.00	8,700
— .20	594	2.80	1,985	6.20	3,846	10.50	9,950
— .10	636	3.00	2,083	6.40	3,975	11.00	11,200
.00	680	3.20	2,182	6.60	4,109	11.50	12,450
.10	726	3.40	2,280	6.80	4,251	12.00	13,700
.20	772	3.60	2,379	7.00	4,400	12.50	14,950
.40	864	3.80	2,478	7.20	4,554	13.00	16,200
.60	956	4.00	2,577	7.40	4,716	13.50	17,450
.80	1,048	4.20	2,676	7.60	4,884	14.00	18,700
1.00	1,140	4.40	2,779	7.80	5,053	15.00	21,200
1.20	1,232	4.60	2,886	8.00	5,225	16.00	23,700
1.40	1,324	4.80	2,997	8.20	5,408	17.00	26,200
1.60	1,416	5.00	3,112	8.40	5,616	18.00	28,700
1.80	1,510	5.20	3,230	8.60	5,850		

a Above gage height 10.0 feet the rating curve is a tangent, the difference being 250 per tenth.

JANUARY 1 TO DECEMBER 31, 1898.[a]

—1.00	370	0.80	1,060	2.60	1,960	5.80	3,720
— .90	388	.90	1,105	2.70	2,015	6.00	3,830
— .80	440	1.00	1,150	2.80	2,070	6.50	4,110
— .70	475	1.10	1,195	2.90	2,125	7.00	4,410
— .60	510	1.20	1,240	3.00	2,180	7.50	4,715
— .50	550	1.30	1,285	3.20	2,290	8.00	5,060
— .40	580	1.40	1 330	3.40	2,400	8.50	5,440
— .30	620	1.50	1,380	3.60	2,510	9.00	5,880
— .20	660	1.60	1,430	3.80	2,620	9.50	6,340
— .10	700	1.70	1,480	4.00	2.730	10.00	6,900
.00	740	1.80	1,530	4.20	2,840	11.00	8,800
.10	780	1.90	1,580	4.40	2,950	12.00	11,800
.20	820	2.00	1,630	4.60	3,060	13.00	15,000
.30	860	2.10	1,685	4.80	3,170	14.00	18,200
.40	900	2.20	1,740	5.00	3,280	15.00	21,400
.50	940	2.30	1,795	5.20	3,390	16.00	24,600
.60	980	2.40	1,850	5.40	3,500	17.00	27,800
.70	1,020	2.50	1,905	5.60	3,610	18.00	31,000

a Above gage height 12.0 feet the rating curve is a tangent, the difference being 320 per tenth.

Rating tables for Ocmulgee River at Macon—Continued.

JANUARY 1 TO DECEMBER 31, 1899.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft*	*Feet*	*Sec.-ft.*
0.20	580	2.00	1,360	3.80	2,440	7.20	4,480
.30	600	2.10	1,420	3.90	2,500	7.40	4,600
.40	620	2.20	1,480	4.00	2,560	7.60	4,720
.50	650	2.30	1,540	4.20	2,680	7.80	4,860
.60	690	2.40	1,600	4.40	2,800	8.00	5,010
.70	730	2.50	1,660	4.60	2,920	8.50	5,410
.80	790	2.60	1,720	4.80	3,040	9.00	5,810
.90	860	2.70	1,780	5.00	3,160	9.50	6,250
1.00	950	2.80	1,840	5.20	3,280	10.00	6,820
1.10	995	2.90	1,900	5.40	3,400	10.50	7,450
1.20	940	3.00	1,960	5.60	3,520	11.00	8,120
1.30	990	3.10	2,020	5.80	3,640	11.50	8,935
1.40	11,040	3.20	2,080	6.00	3,760	12.00	10,010
1.50	11,090	3.30	2,140	6.20	3,880	13.00	12,900
1.60	11,140	3.40	2,200	6.40	4,000	14.00	16,000
1.70	11,195	3.50	2,260	6.60	4,120	15.00	19,200
1.80	11,250	3.60	2,320	6.80	4,240	16.00	22,400
1.90	1,305	3.70	2,380	7.00	4,360		

JANUARY 1 TO DECEMBER 31, 1900.[b]

10.00	6,820	12.50	10,300	15.00	18,100	20.00	39,100
10.50	7,420	13.00	11,240	16.00	22,300	21.00	43,300
11.00	8,020	13.50	12,470	17.00	26,500	22.00	47,500
11.50	8,645	14.00	13,900	18.00	30,700	23.00	51,700
12.00	9,460	14.50	16,000	19.00	34,900		

[b] Below gage height 10.0 feet this table is the same as the 1899 table.

JANUARY 1 TO DECEMBER 31, 1901.[c]

1.70	978	3.10	1,594	4.50	2,365	6.80	3,940
1.80	1,019	3.20	1,643	4.60	2,426	7.00	4,090
1.90	1,059	3.30	1,693	4.70	2,488	7.20	4,243
2.00	1,100	3.40	1,744	4.80	2,551	7.40	4,398
2.10	1,142	3.50	1,796	4.90	2,615	7.60	4,556
2.20	1,184	3.60	1,849	5.00	2,680	7.80	4,717
2.30	1,227	3.70	1,903	5.20	2,811	8.00	4,880
2.40	1,270	3.80	1,958	5.40	2,945	8.20	5,047
2.50	1,314	3.90	2,014	5.60	3,081	8.40	5,218
2.60	1,359	4.00	2,070	5.80	3,219	8.60	5,395
2.70	1,405	4.10	2,127	6.00	3,360	8.80	5,579
2.80	1,451	4.20	2,185	6.20	3,502	9.00	5,770
2.90	1,498	4.30	2,244	6.40	3,646	9.50	6,265
3.00	1,546	4.40	2,304	6.60	3,792	10.00	6,820

[c] Above gage height 10.0 feet this table is the same as the 1900 table.

JANUARY 1 TO DECEMBER 31, 1902.[a]

3.10	800	4.40	1,685	5.70	2,700	7.80	4,565
3.20	865	4.50	1,760	5.80	2,780	8.00	4,755
3.30	930	4.60	1,835	5.90	2,865	8.20	4,945
3.40	995	4.70	1,910	6.00	2,950	8.40	5,140
3.50	1,060	4.80	1,985	6.20	3,120	8.60	5,340
3.60	1,125	4.90	2,060	6.40	3,290	8.80	5,540
3.70	1,190	5.00	2,140	6.60	3,460	9.00	5,740
3.80	1,260	5.10	2,220	6.80	3,640	9.20	5,945
3.90	1,330	5.20	2,300	7.00	3,820	9.40	6,155
4.00	1,400	5.30	2,380	7.20	4,000	9.60	6,370
4.10	1,470	5.40	2,460	7.40	4,185	9.80	6,590
4.20	1,540	5.50	2,540	7.60	4,375	10.00	6,820
4.30	1,610	5.60	2,620				

[a] Above gage height 10.0 feet this table is the same as the 1900 table.

Rating tables for Ocmulgee River at Macon—Continued.

JANUARY 1 TO DECEMBER 31, 1903.[b]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-feet*	*Feet*	*Sec.-feet*	*Feet*	*Sec.-feet*	*Feet*	*Sec.-feet*
2.00	810	3.30	1,505	5.20	2,640	7.80	4,290
2.10	860	3.40	1,560	5.40	2,760	8.00	4,420
2.20	910	3.50	1,620	5.60	2,880	8.50	4,770
2.30	960	3.60	1,680	5.80	3,000	9.00	5,170
2.40	1,010	3.70	1,740	6.00	3,120	9.50	5,570
2.50	1,065	3.80	1,800	6.20	3,250	10.00	6,060
2.60	1,120	3.90	1,860	6.40	3,380	11.00	7,280
2.70	1,175	4.00	1,920	6.60	3,510	12.00	9,020
2.80	1,230	4.20	2,040	6.80	3,640	13.00	11,140
2.90	1,285	4.40	2,160	7.00	3,770	14.00	13,900
3.00	1,340	4.60	2,280	7.20	3,900		
3.10	1,395	4.80	2,400	7.40	4,030		
3.20	1,450	5.00	2,520	7.60	4,160		

JANUARY 1 TO DECEMBER 31, 1904.[c]

—0.30	250	0.70	490	1.70	810	3.40	1,660
— .20	270	.80	510	1.80	850	3.60	1,770
— .10	290	.90	540	1.90	895	3.80	1,880
.00	310	1.00	570	2.00	940	4.00	2,010
.10	330	1.10	600	2.20	1,030	4.20	2,130
.20	350	1.20	630	2.40	1,130	4.40	2,250
.30	375	1.30	665	2.60	1,230	4.60	2,370
.40	400	1.40	700	2.80	1,330	4.80	2,490
.50	425	1.50	735	3.00	1,440	5.00	2,610
.60	450	1.60	770	3.20	1,550		

[b] Above gage height 14.0 feet this table is the same as the 1900 table.
[c] For gage heights above 5.0 feet the discharge has been estimated from 1903 measurements.

JANUARY 1 TO DECEMBER 31, 1905.[c]

—0.60	270	0.70	640	2.00	1,075	3.60	1,800
— .50	295	.80	670	2.10	1,110	3.80	1,910
— .40	320	.90	700	2.20	1,150	4.00	2,020
— .30	345	1.00	730	2.30	1,190	4.20	2,130
— .20	370	1.10	760	2.40	1,230	4.40	2,250
— .10	400	1.20	795	2.50	1,270	4.60	2,370
.00	430	1.30	830	2.60	1,315	4.80	2,490
.10	460	1.40	865	2.70	1,360	5.00	2,610
.20	490	1.50	900	2.80	1,405		
.30	520	1.60	935	2.90	1,450		
.40	550	1.70	970	3.00	1,500		
.50	580	1.80	1,005	3.20	1,600		
.60	610	1.90	1,040	3.40	1,700		

[c] For gage heights above 5.0 feet the discharge has been estimated from 1903 measurements.

JANUARY 1 TO DECEMBER 31, 1906.

2.00	1,075	3.50	1,750	5.00	2,610	8.00	4,580
2.10	1,110	3.60	1,800	5.20	2,730	9.00	5,340
2.20	1,150	3.70	1,855	5.40	2,850	10.00	6,240
2.30	1,190	3.80	1,910	5.60	2,980	11.00	7,270
2.40	1,230	3.90	1,965	5.80	3,110	12.00	8,400
2.50	1,270	4.00	2,020	6.00	3,240	13.00	9,600
2.60	1,315	4.10	2,075	6.20	3,372	14.00	10,900
2.70	1,360	4.20	2,130	6.40	3,504	15.00	12,300
2.80	1,405	4.30	2,190	6.60	3,636	16.00	13,800
2.90	1,450	4.40	2,250	6.80	3,768	17.00	15,400
3.00	1,500	4.50	2,310	7.00	3,900	18.00	17,100
3.10	1,550	4.60	2,370	7.20	4,032	19.00	18,900
3.20	1,600	4.70	2,430	7.40	4,164	20.00	20,800
3.30	1,650	4.80	2,490	7.60	4,300		
3.40	1,700	4.90	2,550	7.80	4,440		

NOTE.—The above table is based on discharge measurements made during 1903-1906 and is fairly well defined.

Estimated monthly discharge of Ocmulgee River at Macon.

[Drainage area, 2,425 square miles.]

Month.	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1893.					
January 21 to 31	4,240	1,887	2,881	1.19	0.48
February	18,550	1,328	5,667	2.34	2.44
March 1 to 20, 24 to 31	13,385	1,672	4,488	1.83	1.90
April	7,250	1,285	1,988	0.80	0.89
May	4,330	855	1,844	0.76	0.87
June	8,205	1,200	2,352	0.97	1.08
July	3,330	1,113	1,411	0.58	0.67
August	15,100	1,242	2,336	0.96	1.10
September	10,130	1,371	2,787	1.15	1.28
October	5,750	1,328	1,905	0.79	0.91
November	20,50	1,414	1,552	0.64	0.71
December	2,285	1,414	1,794	0.74	0.85
1894.					
January	4,430	1,457	2,246	0.93	1.07
February	15,925	1,629	4,488	1.85	1.92
March	9,285	2,050	3,415	1.41	1.63
April	4,155	1,629	2,409	0.99	1.10
May	2,050	1,285	1,464	0.60	0.69
June	2,050	1,113	1,359	0.56	0.62
July	5,635	1,285	2,391	0.98	1.13
August	17,350	2,050	3,854	1.59	1.83
September	10,795	1,200	2,723	1.12	1.25
October	20,075	1,113	2,841	1.17	1.35
November	4,600	1,200	1,980	0.82	0.91
December	14,559	1,156	2,827	1.17	1.35
The year	20,075	1,113	2,666	1.10	14.85
1895.					
January	19,750	1,629	4,698	1.94	2.24
February	3,750	2,100	2,610	1.08	1.13
March	30,715	2,050	8,187	3.38	3.90
April	12,975	2,470	5,040	2.08	2.32
May	12,975	2,320	3,244	1.34	1.54
June	2,800	2,006	2,322	0.96	1.07
July	15,100	2,006	4,360	1.80	2.08
August	14,000	1,963	4,529	1.87	2.16
September	3,090	2,050	2,502	1.03	1.15
October	1,629	842	1,036	0.43	0.49
November	1,174	971	1,016	0.42	0.47
December	2,776	941	1,284	0.53	0.61
The year	30,715	842	3,402	1. 40	19.16
1896.					
January	13,600	1,178	3,353	1.38	1.59
February	14,270	1,801	3,889	1.60	1.78
March	4,800	1,586	2,884	1.19	1.37
April	2,860	1,049	1,449	0.60	0.67
May	1,942	727	1,001	0.41	0.47
June	1,586	405	888	0.37	0.41
July	36,200	340	7,496	3.07	3.54
August	2,075	727	1,150	0.47	0.54
September	813	380	608	0.25	0.28
October	727	380	487	0.20	0.23
November	17,950	706	3,227	1.33	1.48
December	13,200	1,070	3,261	1.35	1.56
The year	36,200	340	2,469	1.02	13.87
1897.					
January	4,400	882	1,369	0.56	0.64
February	17,450	1,584	4,275	1.76	1.88
March	28,700	1,604	8,877	3.66	4.22
April	21,575	1,604	5,463	2.25	2.51
May	2,221	1,269	1,692	0.70	0.81
June	2,206	1,094	1,732	0.71	0.79
July	8,250	781	1,913	0.79	0.91
August	6,120	772	1,759	0.73	0.84
September	1,416	481	715	0.29	0.32
October	1,048	442	622	0.26	0.30
November	2,132	481	780	0.32	0.36
December	1,361	864	1,059	0.44	0.51
The year	28,700	442	2,521	1.04	14.04

Estimated monthly discharge of Ocmulgee River at Macon—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1898					
January	3,472	860	1,300	0.54	0.62
February	1,195	820	964	0.40	0.42
March	2,675	840	1,268	0.52	0.60
April	12,120	940	2,619	1.08	1.20
May	1,555	600	909	0.38	0.44
June	1,740	388	653	0.27	0.30
July	5,880	405	1,645	0.68	0.78
August	15,000	940	4,630	1.91	2.20
September	31,640	1,040	6,008	2.48	2.77
October	28,760	1,020	5,734	2.36	2.72
November	18,520	1,555	3,696	1.52	1.70
December	16,920	2,042	3,567	1.47	1.99
The year	31,640	388	2,749	1.13	15.44
1899					
January	19,840	2,380	5,570	2.30	2.66
February	21,920	3,820	8,140	3.36	3.50
March	18,292	3,460	5,495	2.27	2.62
April	11,060	2,770	4,481	1.85	2.06
May	5,090	1,380	2,112	0.87	1.00
June	2,800	810	1,331	0.55	0.61
July	3,220	650	1,196	0.49	0.56
August	2,140	620	1,071	0.44	0.51
September	1,720	580	880	0.36	0.40
October	6,820	600	1,339	0.55	0.63
November	3,340	620	997	0.41	0.46
December	4,000	850	1,581	0.65	0.75
The year	21,920	580	2,849	1.17	15.76
1900					
January	2,920	940	1,530	0.63	0.73
February	46,240	1,090	9,700	4.00	4.16
March	7,900	3,280	4,644	1.92	2.21
April	30,700	2,620	7,005	2.89	3.22
May	5,490	1,900	2,871	1.18	1.36
June	39,940	1,900	8,216	3.39	3.78
July	11,950	2,140	3,615	1.49	1.72
August	3,820	1,480	1,995	0.82	0.95
September	11,950	1,195	2,560	1.06	1.18
October	5,250	1,195	1,876	0.77	0.89
November	9,940	1,380	2,307	0.95	1.06
December	10,840	1,660	4,079	1.68	1.94
The year	46,240	940	4,200	1.73	23.20
1901					
January	13,010	2,244	4,908	2.02	2.33
February	21,880	2,185	5,165	2.13	2.22
March	22,720	1,698	4,586	1.89	2.18
April	34,060	2,244	6,556	2.70	3.01
May	13,590	1,546	2,806	1.16	1.34
June	6,704	1,698	3,323	1.37	1.53
July	19,780	1,314	2,521	1.04	1.20
August	16,420	1,184	4,686	1.93	2.23
September	29,440	1,227	3,913	1.61	1.80
October	3,081	978	1,412	.58	.67
November	1,314	978	1,104	.46	.51
December	30,280	1,059	4,324	1.78	2.05
The year	34,060	978	3,775	1.56	21.07
1902					
January	21,040	800	2,242	.92	1.06
February	38,680	2,060	8,444	3.48	3.62
March	50,860	4,280	12,700	5.24	6.04
April	10,840	2,780	4,758	1.95	2.18
May	3,290	1,540	2,292	.95	1.10
June	3,120	995	1,631	.67	.75
July	2,300	800	1,169	.48	.55
August	6,280	865	1,624	.67	.77
September	3,680	865	1,377	.57	.64
October	2,620	800	1,430	.59	.68
November	5,540	800	1,423	.59	.66
December	11,950	1,125	2,961	1.22	1.41
The year	50,860	800	3,502	1.44	19.46

Estimated monthly discharge of Ocmulgee River at Macon—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1903					
January	2,760	1,800	2,191	0.90	1.04
February	42,040	1,920	11,845	4.89	5.09
March	31,960	3,380	9,561	3.94	4.54
April	15,160	2,760	5,003	2.06	2.30
May	7,380	2,040	2,991	1.23	1.42
June	28,180	1,920	4,962	2.05	2.29
July	7,380	1,450	2,558	1.05	1.21
August	7,660	1,175	2,460	1.01	1.16
September	16,840	810	2,380	.98	1.09
October	2,460	960	1,110	.46	.53
November	1,980	910	1,235	.51	.57
December	1,740	960	1,272	.52	.60
The year	42,040	810	3,964	1.63	21.84
1904					
January	9,490	985	2,064	.851	.981
February	6,540	1,495	3,149	1.30	1.40
March	4,100	1,440	2,214	.913	1.05
April	3,050	1,330	1,535	.633	.706
May	1,830	665	1,120	.462	.533
June	2,490	510	1,029	.424	.473
July	2,370	480	772	.318	.367
August	12,600	810	2,967	1.22	1.41
September	2,430	330	671	.277	.309
October *a*	400	250	300	.124	.143
November	985	290	602	.248	.277
December	3,505	570	1,295	.534	.616
The year	12,600	250	1,476	.609	8.26
1905					
January	5,170	970	1,599	.659	.760
February	23,980	1,040	5,307	2.19	2.28
March	2,940	1,230	1,816	.749	.864
April	3,315	1,075	1,484	.612	.683
May	2,460	935	1,539	.635	.732
June	2,400	640	1,072	.442	.493
July	4,560	700	1,878	.774	.892
August	6,830	400	1,466	.605	.698
September	1,230	270	533	.220	.246
October	1,450	466	696	.287	.331
November	2,130	526	810	.334	.373
December	25,240	670	5,580	2.30	2.65
The year	25,240	270	1,962	.817	11.00
1906					
January	20,600	2,430	5,820	2.40	2.77
February	3,570	1,800	2,430	1.00	1.04
March	15,400	1,700	5,980	2.47	2.85
April	5,520	1,600	2,560	1.06	1.18
May	2,490	1,150	1,520	.628	.72
June	17,100	1,080	4,170	1.72	1.92
July	6,740	1,190	2,890	1.19	1.37
August	7,490	1,500	3,300	1.36	1.57
September	6,060	1,150	2,860	1.18	1.32
October	17,500	1,450	4,510	1.86	2.14
November	2,920	1,360	1,670	.690	.77
December	3,770	1,360	1,890	.781	.90
The year	20,600	1,080	3,300	1.36	18.55

a Gage heights from October 3 to 5 are considered too low to represent the true mean. The minimum discharge for the month has been assumed to apply for those days.

YELLOW RIVER NEAR STONE MOUNTAIN.

This station was established in 1905 for the purpose of making a series of miscellaneous measurements. It is located at the single-span bridge known as Sextons Bridge, about 6 miles east from Stone Mountain and 2½ miles above the old Annistown factory site, where there is a large amount of fall.

The section is good for measurements, but the bed is sandy and shifting. Discharge measurements are made from the bridge. Gage heights are determined directly from the bench mark, which is the top of the downstream end of the floor beam at the middle of the span; elevation, 21.00 feet above the datum of the assumed gage.

Discharge measurements of Yellow River near Stone Mountain.

Date.	Gage height.	Discharge
1905.	*Feet*	*Sec.-ft.*
January 28	1.96	96
November 23	1.78	57

YELLOW RIVER AT ALMON.

A temporary station was maintained from September 12 to December 31, 1897, at a low bridge about 200 yards below the Georgia Railroad crossing. No records were kept during 1898. On May 9, 1899, the station was reestablished at a wagon bridge about three-fourths of a mile north of the town of Almon and the same distance up the river from the Georgia Railroad crossing. The station was discontinued December 31, 1901.

The gage is fastened to the side of the upstream post of a bridge bent near the left bank. The bench mark is a railroad spike driven into a sycamore tree on the left bank of the river about 100 feet above the bridge; elevation, 7.00 feet above the gage datum.

Discharge measurements of Yellow River at Almon.

Date.	Gage height	Discharge	Date.	Gage height	Discharge
1896.	*Feet*	*Sec.-ft.*	1899.	*Feet*	*Sec.-ft.*
September 19	0.75	62	August 7	1.40	218
			October 19	1.70	200
1897.			1900.		
March 27	3.90	876	April 19	9.00	3,295
June 21	2.50	287	November 30	2.40	341
September 7	1.53	123	December 22	4.50	966
December 8	2.10	227			
1899.			1901.		
May 3	2.97	481	January 29	3.40	541
May 9	3.16	561	April 3	13.80	4,536
May 16	2.30	364	June 14	3.80	610
June 6	1.80	235	August 8	2.58	283
June 27	2.42	427	October 26	2.33	253

Daily gage height, in feet, of Yellow River at Almon.

Day	Sept.	Oct.	Nov.	Dec.	Day	Sept.	Oct.	Nov.	Dec.
1897					1897				
1	.....	1.2	1.6	2.2	17	1.25	1.5	1.68	2.0
2	.....	1.1	1.65	2.8	18	1.3	1.6	1.69	2.08
3	.....	1.15	1.98	2.7	19	1.3	1.7	1.65	1.98
4	.....	1.2	1.9	2.2	20	1.22	1.8	1.64	2.0
5	.....	1.1	1.88	2.8	21	1.2	1.7	1.68	2.08
6	.....	1.15	1.7	2.9	22	1.2	1.68	1.67	2.09
7	.....	1.1	1.5	2.1	23	1.28	1.66	1.66	2.2
8	.....	1.1	1.6	2.08	24	1.35	1.6	1.7	2.18
9	.....	1.15	1.75	2.06	25	1.25	1.58	1.68	2.1
10	.....	1.2	1.7	2.0	26	1.3	1.5	1.7	2.18
11	.....	1.35	1.68	1.98	27	1.35	1.4	1.7	2.1
12	1.4	1.9	1.66	1.98	28	1.3	1.4	1.76	2.0
13	1.3	1.98	1.64	1.95	29	1.28	1.45	1.8	1.98
14	1.42	1.9	1.64	1.89	30	1.24	1.5	2.0	2.0
15	1.4	1.8	1.64	1.86	31	.....	1.5	.....	2.04
16	1.3	1.52	1.64	1.90					

Daily gage height, in feet, of Yellow River at Almon—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1899.												
1	.....	.....	.....	.....	.....	2.4	1.6	1.9	2.1	1.2	1.6	2.0
2	.....	.....	.....	.....	.....	2.1	1.5	1.8	2.0	1.2	1.6	2.7
3	.....	.....	.....	.....	.....	2.0	1.4	1.7	1.8	1.2	1.5	2.5
4	.....	.....	.....	.....	.....	1.9	1.3	1.6	1.6	1.2	1.5	2.3
5	.....	.....	.....	.....	.....	1.8	1.4	1.6	1.5	1.7	1.5	2.0
6	.....	.....	.....	.....	.....	1.8	1.5	1.4	1.5	2.0	1.5	1.9
7	.....	.....	.....	.....	.....	1.7	1.8	1.4	1.5	2.5	1.5	1.9
8	.....	.....	.....	.....	.....	1.7	1.6	1.4	1.5	4.0	1.5	1.9
9	.....	.....	.....	.....	3.2	1.7	1.8	1.3	1.4	2.8	1.5	1.9
10	.....	.....	.....	.....	2.8	1.7	1.6	1.3	1.4	2.2	1.5	1.9
11	.....	.....	.....	.....	2.8	1.7	1.4	1.3	2.5	1.8	1.5	1.9
12	.....	.....	.....	.....	2.7	2.0	1.4	1.3	2.0	1.8	1.5	4.0
13	.....	.....	.....	.....	2.7	2.5	1.3	1.2	1.7	1.8	1.5	3.0
14	.....	.....	.....	.....	2.5	2.1	1.3	1.2	1.5	1.8	1.5	2.5
15	.....	.....	.....	.....	2.5	1.9	1.2	1.2	1.5	1.7	1.5	2.3
16	.....	.....	.....	.....	2.5	1.8	1.2	1.1	1.4	1.7	1.6	2.0
17	.....	.....	.....	.....	2.3	1.8	1.2	1.1	1.4	1.7	1.5	2.0
18	.....	.....	.....	.....	2.1	1.8	1.8	1.0	1.4	1.7	1.5	2.0
19	.....	.....	.....	.....	2.3	1.7	1.4	1.0	1.3	1.7	1.5	2.0
20	.....	.....	.....	.....	2.1	1.6	1.4	1.0	1.3	2.0	1.5	2.0
21	.....	.....	.....	.....	2.0	1.5	1.6	1.0	1.3	1.9	1.5	2.0
22	.....	.....	.....	.....	2.3	1.5	1.8	1.0	1.3	1.7	1.5	2.0
23	.....	.....	.....	.....	2.8	1.5	2.0	1.0	1.3	1.5	2.2	2.0
24	.....	.....	.....	.....	2.5	1.4	1.4	1.0	1.2	1.5	2.2	5.5
25	.....	.....	.....	.....	2.2	1.4	1.6	1.0	1.2	1.5	1.9	4.6
26	.....	.....	.....	.....	2.0	3.2	2.4	3.6	1.2	1.5	4.5	3.4
27	.....	.....	.....	.....	2.0	2.6	5.8	3.0	1.2	1.5	4.0	2.5
28	.....	.....	.....	.....	2.0	2.0	5.0	2.8	1.2	1.5	3.2	2.5
29	.....	.....	.....	.....	1.9	2.0	3.7	2.7	1.2	1.6	2.5	2.5
30	.....	.....	.....	.....	1.8	1.8	2.8	2.5	1.2	1.7	2.0	2.5
31	.....	.....	.....	.....	3.3	.....	2.0	2.3	.....	1.7	.....	2.3
1900.												
1	2.1	2.0	4.5	3.1	3.7	2.4	4.0	3.4	3.0	2.0	2.0	2.4
2	1.9	2.0	4.5	3.0	3.8	2.4	5.0	2.7	3.0	2.0	2.0	2.3
3	1.9	2.0	3.5	3.0	7.2	2.4	5.0	2.5	2.5	2.0	2.0	2.3
4	1.9	2.0	3.4	3.0	6.9	2.4	4.7	2.3	2.3	2.5	4.3	7.5
5	2.0	2.5	3.2	3.0	4.0	3.4	4.0	2.3	2.1	2.5	4.0	7.0
6	2.0	2.7	3.0	3.0	3.6	4.0	3.5	2.2	2.1	2.8	3.0	5.0
7	2.0	2.5	3.0	2.9	3.4	3.4	3.0	2.1	2.0	3.5	2.5	3.5
8	2.0	2.5	4.7	2.9	3.2	6.7	3.0	2.0	2.0	4.0	2.0	3.0
9	2.0	3.5	10.0	2.9	3.1	4.4	3.0	2.0	2.0	3.0	2.0	2.9
10	2.3	5.7	6.0	2.9	3.0	3.3	3.0	2.0	2.0	2.7	2.0	2.8
11	2.9	5.9	4.0	3.9	3.0	3.1	3.0	1.9	2.0	2.4	2.0	2.8
12	4.4	15.0	3.8	4.7	3.0	2.9	3.0	1.9	2.0	2.4	2.0	2.9
13	3.5	20.0	3.6	4.0	2.9	2.8	3.0	1.9	2.0	2.4	2.0	2.7
14	3.0	15.0	3.4	3.4	2.8	3.2	3.0	1.9	3.0	2.3	2.0	4.0
15	2.5	7.0	3.3	3.0	2.8	3.0	3.0	2.5	8.0	2.3	2.0	3.5
16	2.5	5.0	3.8	2.0	2.8	4.0	2.8	2.3	7.0	2.2	2.0	3.2
17	2.4	4.9	3.4	3.0	2.8	6.0	2.7	2.2	4.0	2.1	2.0	3.0
18	3.4	4.7	3.0	8.0	2.7	5.0	2.6	2.0	3.0	2.0	2.0	2.8
19	4.0	3.6	3.4	9.0	3.5	4.0	2.5	2.0	2.5	2.0	2.0	2.8
20	4.3	4.7	5.0	6.8	2.8	3.5	2.0	2.0	2.0	2.0	2.0	5.0
21	3.6	3.9	4.3	12.0	2.8	3.2	2.0	2.0	2.0	2.0	2.0	6.5
22	3.0	3.8	3.7	10.0	2.6	3.0	2.0	2.5	2.0	2.0	2.0	4.5
23	2.8	3.7	3.4	6.0	2.6	7.5	2.0	2.5	2.0	3.0	2.0	3.5
24	2.6	3.7	3.7	7.2	4.0	11.0	2.0	2.4	2.0	3.0	2.0	3.5
25	2.5	3.7	5.5	12.0	3.0	11.0	2.5	2.3	2.0	2.5	2.0	3.5
26	2.4	3.8	8.0	6.8	2.8	12.0	2.0	2.0	2.0	2.3	4.5	3.0
27	2.3	3.8	6.0	6.0	2.6	9.0	3.0	2.0	2.0	2.0	3.5	3.0
28	2.2	3.8	4.4	5.8	2.4	9.5	3.5	2.0	2.0	2.0	2.5	2.9
29	2.1	.....	4.0	5.4	2.4	6.3	3.5	2.0	2.0	2.0	2.4	2.9
30	2.0	.....	3.5	4.3	2.4	5.0	5.0	2.0	2.0	2.0	2.4	4.0
31	2.0	.....	3.2	.....	2.4	.....	4.0	5.0	.....	2.0	.....	7.5
1901.												
1	6.0	3.4	3.2	6.0	3.2	5.0	3.2	2.4	5.5	3.0	2.2	2.4
2	5.5	3.4	3.2	11.0	3.1	4.1	3.0	2.3	4.2	4.5	2.2	2.4
3	6.0	10.0	3.1	13.9	3.0	3.5	2.9	2.2	3.1	4.3	2.4	3.0
4	5.0	15.0	3.1	8.8	3.0	3.4	2.8	2.2	3.4	4.0	2.4	2.9
5	4.3	12.0	3.1	5.5	3.0	3.3	2.7	2.1	3.4	3.2	2.4	2.8

Daily gage height, in feet, of Yellow River at Almon—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1901												
6	4.0	5.5	3.0	5.0	3.0	3.2	2.6	2.8	3.1	3.0	2.4	2.7
7	3.8	5.5	3.0	4.5	3.0	4.4	2.5	3.0	3.0	3.0	2.4	2.7
8	3.7	5.8	3.0	4.0	2.9	3.5	2.4	2.8	2.9	3.0	2.4	2.8
9	3.5	6.3	3.0	3.9	2.9	3.4	2.3	2.5	2.9	3.0	2.4	2.8
10	3.4	5.4	3.0	3.8	2.8	3.3	2.2	2.4	2.8	3.0	2.4	2.8
11	5.0	4.6	4.5	3.7	2.8	3.2	2.4	2.8	2.8	3.0	2.4	2.8
12	10.0	4.4	4.0	3.7	2.8	3.0	2.3	4.2	2.8	3.0	2.4	2.8
13	10.0	4.0	3.5	4.0	2.7	3.4	2.2	3.4	2.8	2.8	2.4	2.8
14	5.5	3.9	3.0	9.5	2.7	3.6	2.2	2.8	2.8	2.8	2.4	2.8
15	4.5	3.7	2.9	3.4	2.7	6.7	2.8	3.8	2.8	2.7	2.4	6.0
16	4.2	3.5	2.8	5.2	2.6	7.0	3.0	7.0	2.8	2.7	2.4	4.8
17	4.0	3.4	2.8	5.0	2.6	4.8	3.8	7.5	3.5	2.7	3.0	3.2
18	4.0	3.4	2.8	4.0	2.8	7.0	3.4	4.8	9.0	2.7	3.0	3.0
19	3.8	3.4	2.8	5.1	2.8	6.1	10.0	3.5	10.0	2.7	3.0	2.8
20	3.8	3.4	2.8	5.4	2.8	4.1	7.0	6.0	4.8	2.7	3.0	2.8
21	3.5	3.3	2.8	4.5	5.0	3.2	3.4	3.9	3.0	2.7	3.0	2.8
22	3.5	3.2	2.8	4.0	7.5	3.2	3.2	6.0	3.6	2.6	3.0	2.8
23	3.4	3.2	2.8	3.9	6.1	3.1	2.9	10.0	3.6	2.6	3.0	3.0
24	3.8	3.2	5.4	3.8	4.2	3.0	2.8	8.0	3.4	2.6	3.0	3.0
25	4.0	3.4	6.0	3.7	3.6	3.0	2.7	4.7	3.2	2.5	2.8	3.0
26	3.5	3.2	7.0	3.6	3.4	4.0	2.6	3.8	3.2	2.5	2.7	3.0
27	3.4	3.2	10.0	3.5	3.3	4.2	2.4	5.0	3.0	2.5	2.6	3.0
28	3.4	3.2	7.0	3.5	3.2	3.3	2.3	9.0	3.0	2.5	2.5	3.0
29	3.4	.....	5.0	3.4	3.0	3.1	2.2	10.0	3.0	2.5	2.4	10.0
30	4.0	.....	4.0	3.3	2.9	3.1	2.7	4.8	3.0	2.4	2.4	20.0
31	3.5	.....	3.0	.....	5.2	.....	2.5	4.0	.....	2.3	.....	15.0

Rating tables for Yellow River at Almon.[a]

SEPTEMBER 12 TO DECEMBER 31, 1897.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.10	85	1.60	130	2.10	194	2.60	326
1.20	93	1.70	140	2.20	211	2.70	366
1.30	101	1.80	152	2.30	231	2.80	408
1.40	110	1.90	165	2.40	256	2.90	450
1.50	120	2.00	179	2.50	290		

MAY 9 TO DECEMBER 31, 1899.

1.00	120	2.20	345	3.40	615	4.60	885
1.10	133	2.30	367	3.50	637	4.70	907
1.20	147	2.40	390	3.60	660	4.80	930
1.30	160	2.50	412	3.70	682	4.90	952
1.40	175	2.60	435	3.80	705	5.00	975
1.50	193	2.70	457	3.90	727	5.20	1,020
1.60	212	2.80	480	4.00	750	5.40	1,065
1.70	233	2.90	502	4.10	772	5.60	1,110
1.80	255	3.00	525	4.20	795	5.80	1,155
1.90	277	3.10	547	4.30	817		
2.00	300	3.20	570	4.40	840		
2.10	322	3.30	592	4.50	862		

[a] Above gage height 3.8 feet the rating curve is a tangent, the difference being 39 per tenth

Rating tables for Yellow River at Almon—Continued.

JANUARY 1 TO DECEMBER 31, 1900.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.90	275	3.60	660	5.60	1,490	9.00	3,200
2.00	290	3.70	690	5.80	1,585	9.50	3,568
2.10	310	3.80	720	6.00	1,690	10.00	3,937
2.20	330	3.90	750	6.20	1,797	10.50	4,106
2.30	350	4.00	780	6.40	1,904	11.00	4,375
2.40	370	4.10	815	6.60	2,012	11.50	4,643
2.50	390	4.20	850	6.80	2,119	12.00	4,912
2.60	410	4.30	885	7.00	2,227	12.50	5,181
2.70	430	4.40	920	7.20	2,334	13.00	5,450
2.80	455	4.50	955	7.40	2,441	13.50	5,718
2.90	480	4.60	990	7.60	2,549	14.00	5,987
3.00	505	4.70	1,035	7.80	2,656	15.00	6,525
3.10	530	4.80	1,080	8.00	2,763	16.00	7,062
3.20	555	4.90	1,125	8.20	2,870	17.00	7,600
3.30	580	5.00	1,175	8.40	2,977	18 00	8,137
3.40	605	5.20	1,275	8.60	3,085	19.00	8,675
3.50	630	5.40	1,375	8.80	3,192	20.00	9,212

JANUARY 1 TO DECEMBER 31, 1901.

2.10	235	3.80	652	6.00	1,510	9.40	2,836
2.20	250	3.90	691	6.20	1,588	9.60	2,914
2.30	266	4.00	730	6.40	1,666	9 80	2,992
2.40	283	4.10	769	6.60	1,744	10.00	3,070
2.50	301	4.20	808	6.80	1,822	11.00	3,460
2.60	320	4.30	847	7.00	1,900	12.00	3,850
2.70	340	4.40	886	7.20	1,978	13.00	4,240
2.80	361	4.50	925	7.40	2,056	14 00	4,630
2.90	383	4.60	964	7.60	2,134	15.00	5,020
3.00	406	4.70	1,003	7.80	2,212	16.00	5,410
3.10	430	4.80	1,042	8.00	2,290	17.00	5,800
3.20	455	4.90	1,081	8.20	2,368	18.00	6,190
3.30	482	5.00	1,120	8.40	2,446	19.00	6,580
3.40	511	5.20	1,198	8.60	2,524	20.00	6,970
3.50	543	5.40	1,276	8.80	2,602		
3.60	577	5.60	1,354	9.00	2,680		
3.70	614	5.80	1,432	9.20	2,758		

Estimated monthly discharge of Yellow River at Almon.

[Drainage area, 379 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft.-per sq. mile	Depth in inches
1897					
September 12-30	112	93	101	0.27	0.18
October	174	85	119	.31	.36
November	179	120	141	.37	.41
December	450	160	215	.57	.66
1899					
May 9-31	570	255	391	1.03	.88
June	570	175	276	.73	.81
July	1,155	147	284	.75	.86
August	660	120	223	.59	.68
September	412	147	197	.52	.58
October	750	147	256	.68	.78
November	862	193	272	.72	.80
December	1,087	277	405	1.07	1.23
1900					
January	920	275	427	1.13	1.30
February	9,225	290	1,493	3.94	4.10
March	3,837	505	963	2.54	2.93
April	4,912	290	1,432	3.78	4.21
May	2,333	370	622	1.64	1.89
June	4,912	370	1,390	3.67	4.09
July	1,175	290	570	1.50	1.73
August	1,175	275	358	.94	1.08
September	2,763	290	492	1.30	1.45
October	780	290	373	.98	1.13
November	955	290	379	1.00	1.12
December	2,492	350	806	2.43	2.46
The year	9,225	275	775	2.05	27.49
1901					
January	3,070	511	934	2.46	2.84
February	5,020	455	1,076	2.84	2.96
March	3,070	361	710	1.87	2.16
April	4,591	482	1,221	3.22	2.59
May	2,095	320	551	1.45	1.67
June	1,900	406	741	1.96	2.19
July	3,070	250	488	1.29	1.49
August	3,070	235	988	2.61	3.01
September	3,070	361	655	1.73	1.93
October	925	266	397	1.05	1.21
November	406	250	320	.84	.94
December	6,970	283	880	2.32	2.68
The year	6,970	235	947	1.97	25.67

ALCOVY RIVER NEAR COVINGTON

This station was established on April 30, 1901, about 3 miles east of Covington, at a low wooden bridge which is often under water. It was discontinued on December 31, 1904.

The banks are low and liable to overflow. The ground on the right bank is low and swampy for several hundred yards and is flooded by a moderate rise. The bed of the stream is sandy and shifting, and the water is sluggish at low stages. Discharge measurements were made from the upstream side of a low, two-span, wooden bridge about 100 feet long. The initial point for soundings is the end of the bridge floor on the left bank, upstream side. The gage is a vertical rod 10 feet long, spiked to a birch tree on the left bank of the river 2 feet from the upstream side of the bridge. The observer was Stephen Belcher, a farmer living near, who was paid by the Georgia Geological Survey. Bench mark No. 2 is a copper plug set in the solid rock on the north edge of the side ditch on the upstream side of the road, 100 feet from the end of the bridge, on the left bank of the river; elevation, 7.82 feet above the zero of the gage.

Discharge measurements of Alcovy River near Covington.

Date	Gage height	Discharge	Date	Gage height	Discharge
1901	*Feet*	*Sec.-ft.*	1903	*Feet*	*Sec.-ft.*
April 30	3.00	307	August 27	1.60	127
June 14	3.12	353	October 8	1.50	120
August 8	3.64	376	November 14	1.90	157
October 26	2.00	162	December 19	1.85	155
1902			1904		
February 27	4.87	661	February 20	3.67	415
June 14	1.70	156	April 13	2.11	202
July 18	1.32	127	June 16	.63	68
September 12	1.20	128	July 12	1.00	94
1903			September 22	.45	53
March 11	4.41	575	September 22 *a*	.45	42
May 23	3.48	385	September 22 *b*	.45	42
July 24	1.92	174	December 6	3.35	328
			December 6	3.38	358

a 200 feet below bridge. *b* 300 feet above bridge.

Daily gage height, in feet, of Alcovy River near Covington.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.
1901												
1					2.9	4.2	4.0	1.6	5.0	3.0	2.0	2.1
2					2.8	4.3	3.4	1.5	4.5	4.3	2.0	2.0
3					2.8	4.0	2.8	1.4	3.7	4.3	2.0	2.8
4					2.7	3.3	2.6	1.6	3.0	4.2	2.0	3.2
5					2.7	3.0	2.4	1.6	2.8	3.2	2.3	3.0
6					2.7	2.7	2.2	4.3	2.5	2.9	2.1	2.7
7					2.8	4.5	2.0	5.1	2.4	2.5	2.1	2.5
8					2.6	4.0	1.9	4.0	2.2	2.3	2.1	2.5
9					2.5	3.2	1.9	2.5	2.0	2.3	2.0	2.4
10					2.4	2.6	1.8	2.1	2.0	2.3	2.1	2.9
11					2.4	2.4	2.0	5.2	2.0	2.3	2.1	3.0
12					2.3	2.3	2.5	5.0	2.0	2.3	2.1	2.7
13					2.3	2.5	3.1	4.0	1.9	2.5	2.1	2.5
14					2.4	3.1	3.9	3.5	2.0	2.4	2.1	2.5
15					2.3	3.3	4.6	4.8	2.1	2.4	2.0	5.2
16					2.2	3.8	4.3	6.1	2.0	2.3	2.0	5.3
17					2.1	4.3	4.0	5.9	5.0	2.1	2.0	4.5
18					2.0	4.8	3.8	5.5	6.3	2.0	2.1	4.2
19					2.0	5.7	3.3	5.3	5.9	2.0	2.1	3.0
20					2.5	5.3	4.0	4.6	6.0	2.0	2.5	2.8
21					3.4	5.0	4.8	5.6	5.3	1.9	2.8	2.4
22					4.5	3.6	5.3	5.6	3.9	1.9	2.6	2.8
23					4.2	2.9	5.8	6.8	3.2	1.9	2.4	2.8
24					3.7	2.6	5.0	6.2	2.9	2.0	2.4	3.0
25					3.2	2.4	4.2	5.0	2.8	2.0	2.3	3.2
26					2.9	2.8	3.7	4.5	2.6	2.0	2.3	3.3
27					2.8	4.5	3.2	4.0	2.5	2.0	2.2	3.1
28					2.7	5.1	2.7	4.7	2.4	2.0	2.1	3.8
29					2.5	4.9	2.5	6.2	2.4	2.0	2.1	5.4
30				3.0	2.4	3.6	2.0	6.0	2.5	2.0	2.1	6.9
31					3.3		2.4	4.9		2.0		7.4
1902												
1	6.5	5.2	9.5	5.6	3.0	1.9	1.0	1.8	1.4	2.7	1.6	3.5
2	5.4	7.3	7.2	5.0	3.5	1.4	1.0	1.4	1.3	2.5	1.7	5.0
3	4.8	8.8	6.2	4.8	3.2	2.2	1.0	4.2	1.2	2.0	1.6	5.3
4	4.3	7.0	5.8	4.5	3.0	2.0	2.2	3.7	1.0	1.7	1.9	5.1
5	4.0	6.7	5.3	4.3	2.9	1.9	1.7	5.0	1.0	2.0	2.2	4.9

Daily gage height, in feet, of Alcovy River near Covington—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1902												
6	3.7	6.3	5.0	4.2	2.8	1.7	1.7	3.8	1.0	1.9	2.1	4.7
7	3.5	4.9	4.8	4.5	2.7	1.7	1.5	2.5	1.2	1.8	2.0	2.5
8	3.4	4.4	4.6	4.9	2.6	2.5	1.3	2.4	1.1	1.7	2.0	3.2
9	3.3	4.3	4.5	4.7	2.7	3.8	1.2	1.9	1.0	1.6	1.6	3.0
10	3.2	4.0	4.4	4.5	2.6	2.7	1.1	1.5	1.0	1.6	1.6	2.9
11	3.1	3.8	4.3	4.0	2.6	2.2	1.0	1.4	1.0	1.6	1.5	2.7
12	3.0	3.7	4.2	3.8	2.6	2.0	2.5	1.3	1.8	2.2	1.5	2.4
13	2.9	3.6	4.0	3.8	2.5	1.9	2.0	1.0	2.9	2.5	1.5	2.2
14	2.8	3.6	4.4	3.7	2.5	1.8	1.9	1.0	3.3	2.6	1.4	2.2
15	2.7	3.6	4.8	3.7	2.5	2.2	1.8	2.0	2.9	2.1	1.4	2.1
16	2.8	3.8	5.8	3.6	2.6	2.7	1.7	1.9	2.4	1.9	1.6	2.7
17	2.8	3.8	6.8	3.6	2.5	2.5	1.6	1.2	2.0	1.7	1.6	3.0
18	2.7	3.8	6.7	4.3	2.8	2.3	1.4	1.1	1.7	1.5	2.7	3.5
19	2.8	3.7	6.0	4.2	2.7	2.2	1.4	1.3	2.2	1.7	3.2	2.9
20	2.8	3.7	5.7	4.0	2.6	2.1	1.1	1.2	2.8	1.8	2.9	2.4
21	3.0	3.8	5.1	3.9	2.4	2.9	1.1	1.1	2.9	1.6	2.2	3.0
22	3.4	3.8	4.8	3.8	2.6	2.9	1.1	1.0	2.4	1.6	2.0	2.9
23	3.5	3.8	4.5	3.7	2.4	2.8	1.1	1.0	2.1	1.6	1.7	2.8
24	3.0	4.2	4.5	3.7	2.4	2.8	1.1	1.0	1.6	1.6	1.7	2.7
25	3.0	4.3	4.5	3.5	2.3	2.8	1.0	1.0	3.0	1.6	3.3	2.6
26	3.0	4.4	4.3	3.4	2.2	2.8	1.0	1.0	3.0	1.7	4.1	2.4
27	3.0	5.0	3.9	3.0	2.0	2.8	1.0	1.0	3.4	2.1	3.3	2.4
28	3.0	12.8	4.3	3.0	2.0	2.8	2.3	1.2	2.8	2.0	3.0	2.9
29	3.2	.....	5.5	3.0	2.0	1.2	3.5	1.9	2.6	1.9	2.4	2.9
30	3.6	.....	7.4	3.0	2.0	1.2	3.7	2.4	2.8	1.8	2.4	3.0
31	4.0	.....	6.9	.....	2.0	.....	2.8	1.5	.....	1.7	.....	3.0
1903												
1	3.2	2.5	4.9	6.3	3.0	7.0	2.8	1.9	1.2	1.5	1.7	1.9
2	3.0	2.5	5.5	5.7	3.0	6.7	2.6	2.5	1.2	1.4	1.7	1.9
3	2.9	2.7	5.2	5.0	3.0	5.7	2.7	4.5	1.2	1.4	1.8	1.8
4	3.0	3.0	4.7	4.8	5.7	5.2	2.8	3.8	1.2	1.6	2.3	1.8
5	2.9	3.6	4.5	4.7	5.0	5.4	2.7	3.0	1.4	1.6	2.7	1.8
6	2.8	4.0	4.2	4.5	4.5	6.1	2.6	2.7	1.3	1.5	3.0	2.2
7	2.7	4.4	4.2	4.3	4.0	6.0	4.5	2.6	1.2	1.5	2.5	2.1
8	2.6	8.0	4.1	4.8	3.4	5.5	5.5	2.4	1.2	1.5	2.0	2.0
9	2.5	7.5	4.0	6.1	3.5	4.5	4.4	1.8	1.2	1.5	1.9	2.1
10	2.8	7.0	4.5	5.9	3.3	4.0	3.7	1.7	1.2	1.5	1.9	2.5
11	2.8	6.5	4.4	5.6	3.1	3.8	4.8	1.6	1.1	1.4	1.9	2.2
12	3.0	6.5	4.3	4.5	3.0	3.5	4.0	1.6	1.1	1.4	1.9	2.0
13	3.3	6.6	4.7	4.4	2.9	3.3	6.5	1.6	1.0	1.4	1.9	2.0
14	2.9	6.2	5.1	4.7	3.3	3.0	6.3	2.2	1.2	1.4	1.9	2.1
15	2.8	5.3	4.7	4.5	4.0	2.9	5.1	3.0	3.3	1.4	1.9	2.5
16	2.7	4.9	4.6	4.3	4.2	2.8	4.2	4.0	4.4	1.4	1.9	2.3
17	2.6	6.5	4.5	4.0	4.0	2.7	3.2	4.5	4.7	1.4	2.5	2.2
18	2.5	6.7	4.0	3.8	3.5	2.6	2.9	3.5	4.0	2.0	2.2	2.0
19	2.4	6.6	3.8	3.8	3.1	2.4	2.7	2.4	3.7	1.9	2.2	1.8
20	2.3	5.4	3.7	3.7	2.9	2.4	2.5	2.0	2.4	1.8	2.0	2.0
21	2.2	4.8	3.8	3.6	2.8	3.0	2.3	2.4	2.2	1.7	2.0	2.2
22	2.2	4.6	5.5	3.4	2.7	2.8	2.1	3.6	2.0	1.6	2.0	2.5
23	2.2	4.3	7.5	3.1	2.6	2.6	2.0	3.0	1.9	1.6	2.0	2.2
24	2.4	4.0	8.6	2.9	2.5	2.4	1.9	2.5	1.8	1.6	2.0	2.1
25	2.5	3.8	7.4	2.9	2.5	2.3	1.9	2.0	1.7	1.5	2.0	2.0
26	2.5	3.7	6.1	2.9	2.5	2.2	2.9	1.7	1.7	1.5	2.0	2.0
27	2.8	3.6	5.3	3.3	3.3	3.6	2.7	1.6	1.8	1.5	1.9	2.5
28	3.1	4.3	4.9	3.5	3.5	3.6	2.6	1.5	1.7	1.6	1.9	2.4
29	3.0	.....	4.2	3.3	3.1	3.2	2.4	1.4	1.6	1.6	1.9	2.3
30	2.9	.....	5.7	3.1	2.8	3.0	2.0	1.3	1.5	1.5	1.9	2.2
31	2.6	.....	6.2	.....	2.7	.....	2.0	1.3	.....	1.5	.....	2.1
1904												
1	2.0	2.6	2.9	2.4	2.1	2.9	1.25	.8	1.15	.25	.55	1.1
2	2.9	2.5	2.8	2.4	1.9	2.4	1.15	1.2	1.0	.45	.65	1.4
3	2.0	2.4	2.9	2.5	1.8	2.3	.8	3.65	.8	.3	.8	1.5
4	2.2	2.3	3.0	2.4	1.7	1.5	.6	1.85	1.3	.2	1.3	1.7
5	2.4	2.2	2.9	2.0	1.7	1.3	.6	1.45	2.5	.2	1.45	2.5
6	2.3	2.2	2.6	2.0	1.7	1.5	.5	1.3	1.7	.2	1.55	3.4
7	2.2	2.5	4.0	2.5	1.5	1.4	.4	2.8	1.15	.35	1.35	3.45
8	2.1	2.7	4.5	3.0	2.5	1.5	.75	3.1	1.0	.3	.95	3.4
9	2.2	2.5	4.9	3.7	2.2	1.5	1.75	4.4	1.1	.35	.95	2.4
10	2.2	3.5	4.6	2.9	2.6	1.5	1.7	4.8	1.0	.3	.9	2.3

Daily gage height, in feet, of Alcovy River near Covington—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
11	2.3	5.5	4.0	2.5	2.9	1.3	1.65	5.7	1.0	0.3	0.85	2.2
12	2.5	5.0	3.3	2.3	2.0	1.2	1.6	5.9	.75	.3	.85	2.25
13	2.4	4.5	3.0	2.1	1.9	1.1	1.0	4.75	.8	.25	1.5	2.0
14	2.6	4.1	3.0	2.0	1.4	1.0	1.2	3.3	.75	.25	1.45	1.95
15	2.3	3.8	3.5	2.0	1.4	.9	.9	3.1	.75	.25	1.3	1.7
16	2.1	3.6	3.6	2.0	1.5	.8	.75	4.9	.7	.25	1.35	1.7
17	2.5	3.2	3.2	2.0	1.4	.6	.7	4.75	.5	.25	1.2	1.8
18	2.7	3.0	3.0	2.0	1.5	6	.5	2.8	.65	.25	1.1	1.7
19	2.6	3.4	2.8	2.0	1.3	.5	.6	2.0	.6	.25	1.05	1.7
20	2.4	3.7	2.5	2.0	1.3	.4	.7	1.8	.5	.3	1.1	1.6
21	3.4	4.2	2.5	2.1	1.3	.4	.9	1.7	.45	.25	1.15	1.6
22	3.5	4.7	2.9	2.1	1.3	.7	.5	1.4	.4	.25	1.1	1.5
23	4.5	5.0	3.1	2.0	1.2	.6	.7	1.2	.3	.25	1.6	1.5
24	4.1	4.7	3.1	2.1	1.2	.5	.8	1.2	.3	.25	1.8	1.5
25	3.5	4.4	2.9	2.0	1.1	.5	.7	1.2	.5	.9	2.15	1.75
26	3.0	3.9	2.8	2.2	1.1	.5	.6	1.1	.45	.85	2.0	1.85
27	2.9	3.4	2.8	2.2	1.1	.45	.5	1.15	.4	.75	1.5	1.8
28	2.7	3.2	2.7	2.2	1.1	.4	.4	1.7	.35	.65	1.3	2.1
29	2.6	3.0	2.5	2.0	1.0	.75	.6	1.4	.3	.65	1.2	2.6
30	2.5	.....	2.3	1.9	1.0	1.3	.5	1.25	.3	.65	1.2	2.9
31	2.9	.....	2.3	.....	2.0	.....	.7	1.1	.....	.65	.....	2.75

Rating tables for Alcovy River near Covington.

APRIL 30 TO DECEMBER 31, 1901 [a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.40	111	3.00	308	4.60	612	7.40	1,144
1.50	118	3.10	327	4.70	631	7.60	1,182
1.60	126	3.20	346	4.80	650	7.80	1,220
1.70	134	3.30	365	4.90	669	8.00	1,258
1.80	143	3.40	384	5.00	688	8.20	1,296
1.90	152	3.50	403	5.20	726	8.40	1,334
2.00	162	3.60	422	5.40	764	8.60	1,372
2.10	173	3.70	441	5.60	802	8.80	1,410
2.20	185	3.80	460	5.80	840	9.00	1,448
2.30	198	3.90	479	6.00	878	10.00	1,638
2.40	212	4.00	498	6.20	916	11.00	1,828
2.50	226	4.10	517	6.40	954	12.00	2,018
2.60	241	4.20	536	6.60	992	13.00	2,208
2.70	257	4.30	555	6.80	1,030		
2.80	273	4.40	574	7.00	1,068		
2.90	290	4.50	593	7.20	1,106		

JANUARY 1 TO DECEMBER 31, 1902 [b]

1.00	108	1.60	152	2.10	197	2.60	252
1.10	114	1.70	160	2.20	207	2.70	265
1.20	121	1.80	169	2.30	218	2.80	278
1.30	128	1.90	178	2.40	229	2.90	292
1.40	136	2.00	187	2.50	240	3.00	308
1.50	144						

[a] Above gage height 3.0 feet the rating curve is a tangent, the difference being 19 per tenth.
[b] Above gage height 3.0 feet the above table is the same as the 1901 table.

Rating tables for Alcovy River near Covington—Continued.

JANUARY 1 TO DECEMBER 31, 1903 [a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.00	88	2.30	206	3.50	392	4.70	680
1.10	94	2.40	218	3.60	410	4.80	650
1.20	100	2.50	232	3.70	430	4.90	670
1.30	107	2.60	246	3.80	450	5.00	690
1.40	114	2.70	260	3.90	470	5.20	730
1.50	122	2.80	274	4.00	490	5.40	770
1.60	130	2.90	290	4.10	510	5.60	810
1.70	140	3.00	306	4.20	530	5.80	850
1.80	150	3.10	322	4.30	550	6.00	890
1.90	160	3.20	338	4.40	570	7.00	1,090
2.00	170	3.30	356	4.50	590	8.00	1,290
2.10	182	3.40	374	4.60	610	9.00	1,490
2.20	194						

JANUARY 1 TO DECEMBER 31, 1904

0.20	38	1.50	135	2.70	259	3.90	460
.30	45	1.60	144	2.80	272	4.00	480
.40	52	1.70	153	2.90	286	4.20	522
.50	59	1.80	162	3.00	300	4.40	564
.60	66	1.90	171	3.10	315	4.60	606
.70	73	2.00	180	3.20	331	4.80	648
.80	80	2.10	190	3.30	347	5.00	690
.90	87	2.20	201	3.40	364	5.20	734
1.00	95	2.30	212	3.50	382	5.40	778
1.10	103	2.40	223	3.60	401	5.60	822
1.20	111	2.50	234	3.70	420	5.80	866
1.30	119	2.60	246	3.80	440	6.00	910
1.40	127						

[a] At about 6 feet gage height the right bank overflows for a width of about 1,000 feet. Bank is covered by a thick swamp growth, so the velocity is probably small. Above gage height 3.6 feet the rating curve is a tangent, the difference being 20 per tenth.

Estimated monthly discharge of Alcovy River near Covington.

[Drainage area, 228 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1901					
May	593	162	271	1.19	1.37
June	821	198	442	1.94	2.16
July	840	143	377	1.65	1.90
August	1,090	111	582	2.55	2.94
September	935	152	361	1.58	1.76
October	555	152	228	1.00	1.15
November	273	162	183	.80	.89
December	1,144	162	393	1.72	1.98
1902					
January	973	265	391	1.72	1.98
February	2,170	422	675	2.96	3.08
March	1,543	479	754	3.31	3.82
April	802	308	496	2.18	2.43
May	403	187	251	1.10	1.27
June	460	121	195	.86	.96
July	441	108	163	.71	.82
August	688	108	193	.85	.98
September	384	108	204	.89	.99
October	265	144	181	.79	.91
November	517	136	212	.93	1.04
December	745	197	344	1.51	1.74
The year	2,170	108	388	1.48	20.02

Estimated monthly discharge of Alcovy River near Covington—Continued.

Month	Discharge in second feet			Run-off	
	Maximum	Minimum	Mean	Sec. ft. per sq. mile	Depth in inches
1903					
January	356	194	262	1.15	1.33
February	1,290	232	691	3.03	3.16
March	1,410	430	689	3.02	3.48
April	950	170	535	2 35	2.62
May	830	232	371	1.63	1.88
June	1,090	194	468	2.05	2.29
July	990	160	375	1.64	1.89
August	590	107	244	1.07	1.23
September	630	88	186	.82	.91
October	170	114	126	.55	.63
November	306	140	178	.79	.88
December	232	150	185	.81	.93
The year	1,410	88	359	1.58	21.23
1904					
January	585	180	264	1.16	1.34
February	800	201	406	1.78	1.92
March	669	212	331	1.45	1 67
April	420	171	209	.917	1.02
May	286	95	147	.645	.744
June	286	52	105	.460	.513
July	157	52	84.2	.369	.425
August	888	80	290	1.27	1.46
September	234	45	80.8	.354	.395
October	87	38	50.6	.222	.256
November	195	63	115	.504	.562
December	373	103	193	.846	.975
The year	888	38	190	.831	11.28

ALCOVY RIVER NEAR STEWART

This station was established September 16, 1905, by M. R. Hall. It is located at a wooden wagon bridge known as "Waters Bridge," about 15 miles south of Covington, Ga., and 5 miles from Stewart, below the mouth of Bear Creek and about 4 miles from the mouth of the river. The station is important because it is a short distance below a large amount of fall at the old Newton factory site.

The channel curves to the left bank about 45° in 300 feet above the station, and is straight for 1,000 feet below the station. The right bank is high and will not overflow. The left bank may overflow about 200 feet at high floods. The channel above and below appears to contain much sand, which is shifting, though the bed is mostly rock in the part under the right span of the bridge, to which nearly all of the flow is confined at lowest stage of water.

Discharge measurements are made from the bridge of three spans of about 50 feet each.

A vertical staff gage is attached to a birch tree at the right edge of the water, 12 feet upstream from the bridge. It is read once each day by A. J. White. The bench mark is a cross and circles cut on a solid rock outcrop at the right edge of the water, just under the

downstream side of the bridge; elevation, 2.36 feet above the datum of the gage.

Discharge measurement of Alcovy River near Stewart.

Date	Gage height	Discharge	Date	Gage height	Discharge
1905	*Feet*	*Sec.-ft.*	1906	*Feet*	*Sec.-ft.*
September 16	1.54	48	January 13	4.82	600
September 16	1.55	48	January 13	4.22	483
November 24	2.03	106	April 13	2 89	242
November 24	2.05	105	June 28	5.64	810
	4.80	590	August 16	3.02	242
			October 31		

Daily gage height, in feet, of Alcovy River near Stewart.

Day	Sept.	Oct.	Nov.	Dec.	Day	Sept.	Oct.	Nov.	Dec.
1905					1905				
1	.....	1.65	1.95	2.05	17	1.75	1.65	2.1	4.2
2	.....	1 6	1.8	2.05	18	1.7	1.7	2.1	4.0
3	.....	1.6	1 8	6.25	19	1.7	1.7	2.1	3.8
4	.....	1.7	1.6	6.2	20	1.65	1.7	2.1	5.8
5	.....	1.75	1.65	7 5	21	1.6	1 7	2.0	7.5
6	.....	2.0	1.7	7.0	22	1.6	1 7	2.05	7 0
7	.....	2.05	2.05	6.0	23	1.6	1.7	2.0	7 8
8	.....	1.75	1.75	5.3	24	1.55	1.6	2.0	7.0
9	.....	1.75	1.8	6.3	25	1.55	1.65	2 0	6 0
10	.....	1.65	2 1	5.2	26	1.5	1.8	2.1	5.5
11	.....	2.0	3 3	5.2	27	1.5	1.85	2.2	4.8
12	.....	1.8	2.8	5.8	28	1.5	1.85	2.2	4.4
13	.....	1.95	2.8	6.0	29	1.45	1.95	2.05	4.4
14	.....	2.06	2.7	5.2	30	1.5	1.9	2.15	4 2
15	.....	2.0	2.45	4.8	31	.....	1.9	.....	4 2
16	1.55	1.95	2.25	4.2					

Daily gage height, in feet, of Alcovy River near Stewart.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
1	4.05	4.5	3.2	5.5	2.95	2.6	2.75	6.0	6.5	4.3	2.9	3.0
2	3.9	4.8	3.2	5.1	3.1	2.5	2.65	6.0	4.5	10.4	2.9	3.0
3	7.0	4.4	3.2	4.0	3.05	2.75	2.8	5.8	4.0	8.5	2.85	3.0
4	8.0	4 2	3 5	4.2	3.0	4.0	2.75	4.5	3.1	9.0	3.0	3.0
5	7.0	4.1	3.6	4.1	3.0	3.1	2.85	4.0	2.8	8.5	3.0	3.0
6	8 0	4.0	3.5	4.0	3.1	2.75	2.9	4.2	2.75	9.0	3.0	3.0
7	7.5	4.0	3.5	4.0	3.3	2.7	2.7	4.0	2.7	6.5	3.0	3.0
8	7.0	3.9	4.4	3.9	3.6	2.6	2.9	3.8	2.7	5.8	3.0	3.25
9	5.8	4.0	4 9	3.9	3.8	2.6	6.6	3.5	2.6	5.3	3.0	3.25
10	4.7	4.0	5.0	3.85	3.65	2.5	7.2	3.1	2.5	4.8	3.0	3.25
11	4.6	3.9	5.5	4 3	3.35	2.5	5.0	3.0	2.6	4.9	3.0	3.5
12	4.5	3.9	5.5	4.5	3.1	2.6	4.1	2.9	2.5	3.8	3.15	3.75
13	4.5	3.85	4.8	4 3	3.0	10.5	3.4	3.0	3.3	3.6	3.2	3.7
14	4.4	3.8	4.0	3.9	2.9	10.5	3.5	5.0	3.25	3.5	3.2	3.7
15	4.4	3.8	6.5	3.75	2.8	10.0	3.5	6.2	3.0	3.4	3.3	3.7
16	4.6	3.7	6.2	3.7	2.75	11.0	3.7	6.0	3.1	3.3	3.35	3.4
17	4.5	3.7	5.8	3.6	2.65	11.5	4.4	5.0	2.9	3.3	3.4	3.4
18	4.2	3.5	7.0	3.55	2.6	11.0	6.8	4.0	6.5	3.4	4.8	3.6
19	4.1	3.45	8.0	3.5	2.6	8.5	7.0	3.5	6.0	3.5	4.4	3.6
20	3.9	3.4	8.0	3.4	2.55	6.5	6.5	3.0	5.5	3.6	4.0	4.0
21	4.0	3.85	9.5	3.3	2.5	5.0	5.8	2.9	4.5	3.5	4.0	4.0
22	4.9	3 6	9.0	3 3	2.65	4.0	5.0	2.9	6.0	3.55	3.9	4.3
23	7.5	3.5	8.0	3.2	2.9	3.75	7.0	3.4	8.0	3.4	3.65	4.3
24	7.0	3.45	6.5	3.1	2.8	3.45	5.0	3.25	6.8	3.35	3.4	4.1
25	6.5	3.45	5.5	3.1	2.6	3.1	4.8	3.1	4.5	3.3	3.3	*a*
26	6.5	3.4	5.0	3.0	2.8	2.9	5.5	3.7	4.6	3.2	3.2	.....
27	6.2	3.35	4.9	3.0	3.0	2.9	4.5	4.0	6.0	3.1	3.2	.....
28	6.1	3.25	5.5	3.0	3.25	2.9	3.5	3.0	4.5	3.1	3.15	.....
29	6.0	.....	4.9	3.0	3.9	2.8	5.5	3.0	4.4	3.1	3.1	.....
30	5.5	.....	5.4	2.95	3.25	2.8	5.0	3.0	4.4	3.0	3.05	.....
31	5.0	.....	6.0	.....	2.8	.....	4.8	3.6	.....	3.0	.....	.....

a No records after December 24.

THE POWER PLANT OF THE ATLANTA WATER AND ELECTRIC POWER COMPANY, LOCATED AT MORGAN FALLS NEAR ROSWELL 16 MILES FROM ATLANTA. THE POWER WHICH VARIES FROM 2,250 TO 4,500 HORSE POWER, IS TRANSMITTED TO ATLANTA WHERE IT IS USED FOR OPERATING ELECTRIC CARS, ELECTRIC LIGHTING, ETC.

Rating table for Alcovy River near Stewart from September 16 to December 31, 1905.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.40	34	2.70	192	4.00	412	5.60	796
1.50	44	2.80	206	4.10	432	5.80	852
1.60	55	2.90	220	4.20	452	6.00	910
1.70	66	3.00	236	4.30	474	6.20	970
1.80	77	3.10	252	4.40	496	6.40	1,030
1.90	88	3.20	268	4.50	518	6.60	1,090
2.00	100	3.30	284	4.60	540	6 80	1,150
2.10	112	3.40	300	4.70	564	7.00	1,210
2.20	124	3.50	318	4.80	588	7 20	1,274
2.30	136	3.60	336	4.90	612	7.40	1,338
2.40	150	3.70	354	5.00	636	7.60	1,402
2.50	164	3.80	372	5.20	688	7.80	1,466
2.60	178	3.90	392	5.40	740		

Rating table for Alcovy River near Stewart, for 1906.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.50	170	3.50	334	4.50	580	6.00	910
2.60	185	3.60	352	4.60	552	6.20	970
2.70	200	3.70	370	4.70	585	6.40	1,030
2.80	216	3.80	388	4.80	608	6.60	1,090
2.90	232	3.90	406	4.90	631	6.80	1,150
3.00	248	4.00	425	5.00	645	7.00	1,210
3.10	265	4.10	445	5.20	693	7.20	1,274
3.20	282	4.20	463	5.40	743	7.40	1,338
3.30	299	4.30	487	5.60	796	7.60	1,402
3.40	316	4.40	508	5.80	852	7.80	1,466

NOTE.—The above table is based on ten discharge measurements made during 1905-6 and is fairly well defined below gage height 5.7 feet. Above gage height 7.0 feet the rating curve is a tangent, the difference being 32 per tenth.

Estimated monthly discharge of Alcovy River near Stewart.

[Drainage area, 395 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1905					
September 16-30	72	38	52.9	0.134	0.075
October	106	55	76.5	.194	.224
November	284	55	117	.296	.330
December	1,466	106	766	1.94	2.24
1906					
January	1,530	406	818	2.07	2.39
February	608	290	393	.995	1.04
March	2,010	282	824	2.09	2.41
April	768	240	383	.970	1.08
May	406	170	252	.638	.74
June	2,650	170	764	1.93	2.15
July	1,270	192	582	1.47	1.70
August	1,530	232	481	1.22	1.41
September	1,530	170	518	1.31	1.46
October	2,300	248	635	1.71	1.96
November	608	224	305	.772	.86
December 1-24	457	248	335	.848	.76
The period	2,650	170	524	1.32	17.86

TOWALIGA RIVER NEAR JULIETTE.

The drainage basin of this stream occupies a small area in central Georgia, its headwater tributary adjoining those of Flint River on the west, and small creeks draining into the Ocmulgee on the east. The river is a tributary of Ocmulgee River, entering it 25 miles above Macon. The area drained is a rolling country and extensively cultivated. A gaging station was established by B. M. Hall near its mouth, at the Southern Railway bridge, 2½ miles north of Juliette on May 5, 1899, but observations of gage heights were not started until November 2. The station was discontinued December 31, 1901.

At low stages measurements were made at the wagon bridge a half mile above the railroad bridge. W. L. Jackson, a farmer living a half mile from the bridge, was the observer. His address is Berner, Ga. The rod is nailed to the timber crib at the base of the left-bank pier of the iron single-span bridge. Bench mark No. 1 is at the top of the downstream iron girder under the cross-ties 40 feet from the left end of the bridge; elevation, 37.30 feet above gage datum. Bench mark No. 2 is at the top of the rail at the same point; elevation, 38.80 feet above gage datum.

Discharge measurements of Towaliga River near Juliette

Date	Gage heignt	Discharge	Date	Gage height	Discharge
1899	*Feet*	*Sec.-ft.*	1901	*Feet*	*Sec.-ft.*
May 5	3.45	581	January 14	3.75	563
May 17	2.10	255	February 22	2.70	362
November 2	1.50	167	May 8	2.22	301
November 2	1.50	163	July 27	1.48	172
December 16	1.90	184	September 13	1.55	163
1900			September 22	2.63	312
February 17	6.35	1,025	November 5	1.65	185
April 3	2.60	348			
December 8	2.75	468			

Daily gage-height, in feet, of Towaliga River near Juliette

Day	Nov.	Dec.	Day	Nov.	Dec.	Day	Nov.	Dec.	Day	Nov.	Dec.
1899			1899			1899			1899		
1	.....	1.7	9	1.2	1.6	17	1.6	1.8	25	1.2	3.8
2	1.2	1.65	10	1.1	1.55	18	1.3	1.7	26	3.35	2.5
3	1.2	1.65	11	1.2	1.5	19	1.3	1.7	27	3.2	2.1
4	1.1	1.75	12	1.1	3.7	20	1.2	1.7	28	2.2	1.1
5	1.1	1.75	13	1.1	3.6	21	1.3	1.7	29	1.95	2.0
6	1.1	1.65	14	1.1	2.5	22	1.2	1.5	30	1.8	1.9
7	1.1	1.55	15	1.1	2.0	23	1.3	1.6	31	.....	1.9
8	1.1	1.5	16	1.7	1.9	24	1.2	4.0			

Daily gage height, in feet, of Towaliga River near Juliette—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900												
1	2.2	2.0	2.9	1.8	3.1	2.0	4.0	2.2	4.5	0.9	1.8	1.9
2	2.2	1.9	4.3	1.6	3.6	2.1	4.0	2.2	1.5	1.0	2.0	1.9
3	2.0	1.9	3.1	2.6	4.9	2.1	3.5	1.7	1.9	1.4	8.2	4.7
4	2.0	2.1	2.8	2.8	3.3	3.7	3.5	1.7	1.6	2.1	7.0	4.0
5	1.9	2.7	2.4	2.6	3.1	2.9	4.1	2.3	1.5	3.4	6.4	3.4
6	1.9	2.6	2.4	2.5	2.6	2.5	3.5	1.7	1.3	3.6	5.5	3.0
7	1.9	2.3	1.4	2.7	2.6	3.2	3.3	1.5	1.2	3.9	2.2	3.0
8	1.9	1.4	2.9	2.6	2.5	5.2	4.2	1.3	1.0	3.8	2.1	2.4
9	1.9	2.4	3.4	2.5	2.5	2.4	4.0	1.2	1.0	1.7	2.1	2.4
10	1.9	7.3	2.8	2.5	2.5	2.6	4.0	1.2	1.0	1.5	2.0	2.3
11	1.9	11.8	2.3	3.4	2.4	2.9	3.8	1.2	1.0	1.5	2.0	2.0
12	2.7	14.1	1.3	5.7	2.4	2.8	3.7	1.1	1.0	1.6	1.9	2.0
13	2.8	14.8	2.0	4.0	2.4	2.3	4.4	1.3	1.0	1.7	1.9	2.3
14	2.3	16.5	1.1	2.9	2.3	2.4	3.7	1.0	2.4	1.7	1.9	9.0
15	2.2	16.3	1.0	2.8	2.3	2.3	2.2	1.7	8.0	1.5	1.9	7.4
16	2.1	8.3	4.0	2.7	2.2	2.9	2.0	1.5	6.4	1.4	1.8	4.0
17	2.0	4.8	3.1	2.7	2.2	3.3	1.8	1.3	4.2	1.3	1.8	3.6
18	2.1	3.8	2.3	12.8	2.2	3.8	1.0	1.9	3.1	1.1	1.8	3.0
19	2.8	3.3	1.1	17.8	2.2	4.1	1.0	1.3	2.9	1.1	2.0	2.6
20	3.2	3.2	3.3	14.8	2.2	5.2	1.0	1.2	2.0	1.1	1.9	6.4
21	2.9	2.4	3.1	7.8	2.2	2.2	1.0	1.1	1.4	1.1	1.8	7.5
22	2.5	4.0	2.3	12.8	2.1	1.9	1.5	0.8	1.3	1.1	1.8	5.5
23	2.3	3.3	2.2	5.5	2.1	2.2	1.5	0.9	1.2	2.4	1.9	3.5
24	2.2	2.9	2.7	4.8	2.8	9.8	2.2	2.1	1.3	3.6	1.9	3.5
25	2.2	2.4	3.4	4.1	2.9	10.8	1.9	3.0	1.3	3.5	2.5	2.8
26	2.1	3.0	4.0	3.6	2.5	8.8	1.6	4.3	1.2	2.9	4.4	2.7
27	2.0	2.9	3.6	3.4	2.4	6.8	2.4	2.6	1.2	2.1	3.1	2.5
28	2.1	2.4	2.8	3.2	2.4	6.6	2.5	1.5	1.1	1.5	2.4	2.5
29	2.0	.....	2.4	3.3	2.2	6.2	4.0	1.2	1.1	1.3	2.3	2.3
30	2.0	.....	2.4	3.2	2.1	4.2	5.1	1.6	0.8	1.2	1.9	3.4
31	2.1	.....	2.1	.....	2.1	.....	3.4	5.5	.....	1.2	.....	4.3
1901												
1	5.1	2.8	2.7	8.8	2.5	5.6	2.0	2.0	3.4	2.6	1.5	1.7
2	5.9	3.0	2.7	11.7	2.4	3.7	3.0	3.0	2.5	2.6	1.5	1.7
3	7.2	3.4	2.6	13.9	2.4	2.8	2.2	1.7	2.1	3.0	1.6	1.7
4	5.4	8.3	2.5	12.0	2.3	2.5	2.0	1.6	2.0	2.2	1.6	2.0
5	4.8	8.8	2.5	5.6	2.3	2.3	2.0	1.5	1.8	2.0	1.5	2.5
6	4.3	4.6	2.5	4.7	2.3	2.3	1.8	1.4	1.5	2.0	1.5	2.4
7	4.1	3.5	2.4	4.2	2.2	5.0	2.2	2.6	1.5	2.0	1.5	2.0
8	4.3	5.2	2.4	3.9	2.1	3.8	1.8	2.4	1.5	1.9	1.5	1.8
9	3.9	5.9	2.4	3.5	2.1	2.4	9.2	1.9	1.4	1.8	1.5	1.8
10	3.9	6.0	4.1	3.4	2.1	2.2	2.8	1.8	1.4	1.8	1.5	2.0
11	3.5	5.8	4.1	3.3	2.1	2.2	2.4	4.6	1.5	1.8	1.5	2.0
12	5.1	4.6	2.9	3.2	2.1	2.1	2.2	3.4	1.5	2.0	1.4	2.0
13	5.8	3.6	3.4	4.3	2.1	3.6	2.0	3.1	1.5	1.7	1.4	2.0
14	4.3	3.3	3.1	4.6	2.1	4.0	2.0	2.4	1.8	1.7	1.4	2.0
15	2.9	3.0	3.1	4.0	2.1	5.0	2.0	4.3	1.6	1.7	1.4	7.0
16	2.5	3.0	2.6	3.6	2.1	5.6	2.1	6.1	1.5	1.7	1.4	6.4
17	7.1	2.9	2.9	3.2	2.1	4.5	2.1	11.2	12.2	1.7	1.5	5.3
18	5.8	2.8	2.8	3.1	2.1	3.3	2.0	4.2	7.6	1.7	1.4	2.8
19	3.6	2.7	2.7	4.6	2.1	2.5	9.1	3.1	3.6	1.7	2.0	2.5
20	3.3	2.7	2.5	4.0	2.6	2.3	3.5	4.2	3.0	1.6	2.4	2.3
21	3.1	2.7	2.9	3.4	3.5	2.2	1.8	3.1	3.0	1.5	2.3	2.1
22	3.0	2.6	2.6	3.1	7.6	2.2	1.6	2.6	2.7	1.5	2.1	2.3
23	2.8	2.8	2.4	2.9	7.1	3.0	1.5	5.9	2.4	1.5	1.7	2.2
24	2.8	3.0	2.9	2.9	3.5	4.5	2.6	9.0	2.3	1.5	1.7	2.6
25	3.0	3.0	3.1	2.8	3.4	3.4	2.2	4.6	2.1	1.5	1.7	2.3
26	2.8	3.0	6.3	2.8	2.8	2.2	1.5	4.5	1.8	1.5	1.7	2.1
27	3.0	3.0	11.6	2.8	2.5	2.3	1.4	3.4	1.8	1.5	1.7	3.1
28	2.8	2.7	5.3	2.7	2.5	2.3	1.3	2.4	2.0	1.5	1.7	6.4
29	3.0	.....	4.0	2.7	2.4	2.1	1.8	4.5	3.4	1.5	1.7	11.0
30	3.0	.....	3.6	2.7	2.3	2.0	2.4	3.1	3.0	1.5	1.7	8.5
31	2.8	.....	9.2	.....	4.8	.....	2.0	2.6	.....	1.5	.....	6.4

Rating table for Towaliga River near Juliette from November 2, 1899, to December 31, 1901.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.00	120	2.20	273	4.40	669	10.00	1,677
1.10	127	2.40	309	4.60	705	11.00	1,857
1.20	135	2.60	345	4.80	741	12.00	2,037
1.30	144	2.80	381	5.00	777	13.00	2,217
1.40	154	3.00	417	5.50	867	14.00	2,397
1.50	165	3.20	453	6.00	957	15.00	2,577
1.60	177	3.40	489	6.50	1,047	16.00	2,757
1.70	190	3.60	525	7.00	1,137	17.00	2,937
1.80	204	3.80	561	7.50	1,227	18.00	3,117
1.90	220	4.00	597	8.00	1,317		
2.00	237	4.20	633	9.00	1,497		

a Above gage height 2.0 feet the rating curve is a tangent, the difference being 18 per tenth.

Estimated monthly discharge of Towaliga River near Juliette.

[Drainage area, 350 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1899					
November	480	127	170	0.49	0.53
December	597	127	248	.71	.82
1900					
January	453	220	274	.78	.90
February	2,847	154	1,449	4.14	4.31
March	597	120	354	1.01	1.16
April	3,081	177	751	2.15	2.40
May	759	255	422	1.21	1.40
June	1,821	220	595	1.70	1.90
July	795	120	408	1.17	1.35
August	867	109	222	.63	.73
September	1,317	109	271	.77	.86
October	579	114	243	.69	.80
November	1,353	144	357	1.02	1.14
December	1,497	220	526	1.50	1.73
The year	3,081	109	489	1.40	18.68
1901					
January	1,173	327	602	1.72	1.98
February	1,461	345	576	1.65	1.72
March	1,965	309	520	1.49	1.72
April	2,379	363	707	2.02	2.25
May	1,245	255	380	1.09	1.26
June	885	237	440	1.26	1.41
July	1,533	144	337	.96	1.11
August	1,893	154	531	1.52	1.75
September	1,245	154	360	1.03	1.15
October	417	165	209	.60	.69
November	309	154	185	.53	.59
December	1,857	190	475	1.36	1.57
The year	2,379	144	444	1.27	17.20

MIDDLE OCONEE RIVER NEAR ATHENS

Middle Oconee River rises in Hall County and flows southeastward through Jackson and Clarke counties to its junction with the East Fork, 6 miles below Athens. It drains a rolling area of 300 square miles.

Measurements were begun at Athens on October 11, 1901, the station having been established by Prof. C. M. Strahan, of the University of Georgia. It is located on a wagon bridge, known as Mitchells Bridge, on the Athens and Lawrenceville road, 3½ miles from Athens and about 7½ miles above the junction of Middle Oconee with its eastern fork. It is 4 miles above the dam of the Princeton factory, an 8-foot shoal intervening, and one-third of a mile below the dam of the Athens Electric Railway Company. The station was discontinued on October 25, 1902.

The channel is straight and unobstructed except by remains of old piers just inside the present piers, the old piers being covered at a gage height of 3 feet. The banks are high and the approaches short. The water rises rapidly in time of flood, the maximum gage height being 22.9 feet and the average gage height 2.5 to 3 feet.

Discharge measurements were made from the bridge, which is of the covered wooden lattice type. The initial point for soundings is a spike at the west end of the north bridge truss. The gage is of wire, mounted on the north truss, near the east end of the bridge. It is protected by a plank cover and locked. The bench mark is the top of the lower chord at the gage pulley, 26.85 feet above the river bottom, which is the zero point of the gage, the latter being set to read zero when the weight touches the bottom. The graduations are laid off on the lower chord 20 feet and can be extended to 26 feet.

Discharge measurements of Middle Oconee River at Athens.

Date	Gage height	Discharge	Date	Gage height	Discharge
1901	*Feet*	*Sec.-ft.*	1902	*Feet*	*Sec.-ft.*
October 11	2.80	498	February 28	22.50	16,970
October 26	2.80	491	May 2	(a)	836
December 31	11.18	6,779	June 30	1.70	275
1902			July 17	2.10	400
January 3	3.65	855	July 19	1.95	350
			July 22	1.85	318

a Gaging made 7 miles above Athens.

Daily gage height, in feet, of Middle Oconee River near Athens.

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1901				1901			
1	.....	2.8	2.7	17	2.8	2.7	3.2
2	.....	2.7	2.7	18	2.8	2.7	3.0
3	.....	2.7	3.1	19	2.8	2.8	2.9
4	.....	2.8	3.1	20	2.8	3.0	2.8
5	.....	2.9	2.9	21	2.8	2.9	2.8
6	.....	2.8	2.9	22	2.8	2.8	2.8
7	.....	2.8	2.8	23	2.8	2.8	3.1
8	.....	2.8	2.8	24	2.8	2.8	3.4
9	.....	2.7	2.8	25	2.8	2.7	3.3
10	.....	2.7	3.0	26	2.8	2.7	3.2
11	2.8	2.7	3.0	27	2.7	2.7	3.2
12	2.9	2.8	2.8	28	2.8	2.6	4.2
13	2.9	2.8	2.8	29	2.8	2.7	11.2
14	3.0	2.8	2.9	30	2.8	2.7	13.0
15	2.9	2.8	4.3	31	2.8	.....	10.2
16	2.9	2.7	3.5				

Daily gage height, in feet, of Middle Oconee River, near Athens.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1902										
1	4.2	6.2	19.0	3.0	2.5	2.1	1.7	1.8	1.7	2.2
2	3.9	14.0	7.3	3.2	2.5	2.1	1.7	1.8	1.7	2.3
3	3.7	17.0	5.7	3.0	2.5	2.1	2.1	2.9	1.7	2.4
4	3.5	5.5	5.2	2.9	2.4	2.0	2.0	2.0	1.7	1.9
5	3.5	4.2	4.8	2.9	2.4	2.0	1.9	2.7	1.7	2.3
6	3.5	3.9	4.6	2.9	2.4	2.0	1.8	2.0	1.7	2.3
7	3.4	3.8	4.4	2.9	2.4	2.4	1.8	2.0	1.6	2.1
8	3.4	3.8	3.8	3.0	2.4	2.3	1.8	1.9	1.6	1.9
9	3.3	3.6	3.6	3.0	2.3	2.2	1.8	1.8	2.1	1.8
10	3.3	3.5	3.6	2.9	2.3	2.1	1.8	1.8	2.1	1.8
11	3.3	3.5	3.3	2.9	2.3	2.1	1.9	1.7	1.9	1.8
12	3.2	3.4	3.3	2.8	2.3	2.0	2.0	2.1	1.8	2.3
13	3.2	3.4	4.0	2.8	2.3	2.0	2.5	2.0	2.5	2.3
14	3.2	3.4	3.5	2.8	2.3	2.0	2.3	1.9	2.3	2.1
15	3.2	3.6	3.4	2.8	2.3	2.2	2.3	1.8	1.9	2.0
16	3.2	3.7	5.3	2.8	2.2	2.4	2.2	1.7	1.6	1.9
17	3.2	3.6	3.4	3.2	2.2	2.2	2.1	1.7	1.6	1.9
18	3.1	3.5	4.7	3.7	2.2	2.1	2.0	1.7	1.6	1.8
19	3.2	3.5	3.6	3.0	2.2	2.1	1.9	1.7	1.8	1.8
20	3.3	3.6	3.3	2.8	2.2	2.0	1.8	1.7	2.1	1.8
21	3.3	3.7	3.1	2.8	2.2	2.0	1.8	1.7	1.9	1.8
22	3.2	3.7	3.0	2.8	2.2	2.0	1.9	1.7	1.7	1.8
23	3.2	3.5	2.9	2.7	2.2	2.0	1.9	1.6	1.7	1.8
24	3.2	3.5	2.9	2.7	2.2	1.9	1.9	1.6	1.6	1.8
25	2.2	4.0	2.9	2.6	2.2	1.9	2.2	1.6	3.6	1.8
26	3.2	4.3	2.9	2.6	2.2	1.8	1.8	1.6	5.6	.....
27	3.2	3.8	2.9	2.6	2.2	1.8	2.0	1.6	3.9	.....
28	3.4	25.5	3.4	2.5	2.1	1.8	2.3	1.6	3.0	.....
29	4.4	.....	11.3	2.5	2.1	1.8	2.0	1.7	2.1	.....
30	3.9	.....	18.6	2.6	2.1	1.7	1.8	1.7	2.0	.....
31	4.3	.....	4.6	.....	2.1	.....	1.8	1.7	.....	.....

Rating tables for Middle Oconee River, near Athens.

OCTOBER 11 TO DECEMBER 31, 1901.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.60	430	4.50	1,261	6.80	2,822	11.50	7,050
2.70	464	4.60	1,315	7.00	3,000	12.00	7,500
2.80	499	4.70	1,370	7.20	3,180	12.50	7,950
2.90	535	4.80	1,426	7.40	3,360	13.00	8,400
3.00	572	4.90	1,483	7.60	3,540	13.50	8,850
3.10	610	5.00	1,541	7.80	3,720	14.00	9,300
3.20	650	5.10	1,600	8.00	3,900	15.00	10,200
3.30	691	5.20	1,661	8.20	4,080	16.00	11,100
3.40	733	5.30	1,723	8.40	4,260	17.00	12,000
3.50	776	5.40	1,786	8.60	4,440	18.00	12,900
3.60	820	5.50	1,850	8.80	4,620	19.00	13,800
3.70	865	5.60	1,915	9.00	4,800	20.00	14,700
3.80	911	5.70	1,982	9.20	4,980	21.00	15,600
3.90	958	5.80	2,050	9.40	5,160	22.00	16,500
4.00	1,006	5.90	2,119	9.60	5,340	23.00	17,400
4.10	1,055	6.00	2,190	9.80	5,520	24.00	18,300
4.20	1,105	6.20	2,336	10.00	5,700	25.00	19,200
4.30	1,156	6.40	2,490	10.50	6,150		
4.40	1,208	6.60	2,652	11.00	6,600		

JANUARY 1 TO OCTOBER 25, 1902.[b]

1.60	243	2.40	499	3.20	755	4.00	1,046
1.70	275	2.50	531	3.30	777	4.10	1,088
1.80	307	2.60	563	3.40	819	4.20	1,131
1.90	339	2.70	595	3.50	851	4.30	1,174
2.00	371	2.80	627	3.60	884	4.40	1,217
2.10	403	2.90	659	3.70	929	4.50	1,261
2.20	435	3.00	691	3.80	966		
2.30	467	3.10	723	3.90	1,005		

a Above gage height 7.0 feet the rating curve is a tangent, the difference being 90 per tenth.
b Above gage height 4.5 feet, this table is the same as the 1901 table.

Estimated monthly discharge of Middle Oconee River, near Athens.

[Drainage area, 395 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1901					
October 11-31	572	464	508	1.29	0.80
November	572	430	486	1.23	1.37
December	12,900	464	1,373	3.48	4.01
1902					
January	1,217	723	837	2.12	2.44
February	19,560	819	2,362	5.98	6.23
March	13,800	659	2,189	5.54	6.39
April	884	531	652	1.65	1.84
May	531	403	458	1.16	1.34
June	499	275	383	.97	1.08
July	966	275	375	.95	1.10
August	659	243	317	.80	.92
September	1,915	243	426	1.08	1.20
October 1-25	499	307	367	.93	.87

OCONEE RIVER AT BARNETT SHOALS.

This station was established by Prof. C. M. Strahan, of the University of Georgia, on August 6, 1901, and was discontinued on August 23, 1902, for want of an observer. It was located at Barnetts Bridge, 1 mile above Barnett Shoals and 4 miles east of Watkinsville. Discharge measurements were made from the downstream side of the bridge, which is a covered lattice single-span bridge, with a total length of 109 feet between abutments. The observer was R. L. McRee, a storekeeper at Barnett Shoals, who read the gage once daily at ordinary stages and twice daily during low stages, when the regularity of the flow is affected by the small dam of the Georgia factory, 6½ miles upstream. The gage is a 10-foot rod nailed to a tree on the left bank just above the bridge, and extended to a length of 16 feet by means of a plank marked in feet fastened above. The bench mark is a large nail driven into the tree; elevation, 6.00 feet above the datum of the gage.

Discharge measurements of Oconee River at Barnett Shoals.

Date	Gage height	Discharge	Date	Gage height	Discharge
1901	*Feet*	*Sec.-ft.*	1902	*Feet*	*Sec.-ft.*
May 2	1.40	1,025	January 1	6.35	5,061
August 6	2.70	1,461	March 22	3.20	1,412
August 18	4.53	1,882	May 31	2.10	800
September 6	2.22	825	June 28	1.77	619
September 20	4.77	2,832			
October 19	2.05	808			
December 30	12.10	16,670			

Daily gage height, in feet, of Oconee River at Barnett Shoals.

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Day	Aug.	Sept.	Oct.	Nov.	Dec.
1901						1901					
1	.....	3.3	2.3	2.0	2.1	17	6.0	6.4	2.1	2.0	3.0
2	.....	3.0	3.5	2.0	2.1	18	3.8	3.3	2.1	2.0	2.6
3	.....	2.7	3.9	2.0	2.0	19	4.8	3.6	2.05	2.1	2.3
4	.....	2.5	3.0	2.0	2.3	20	5.9	4.7	2.1	2.2	2.2
5	.....	2.4	2.5	2.0	2.2	21	4.8	3.2	2.1	2.2	2.1
6	.....	2.3	2.3	2.0	2.1	22	3.3	2.8	2.1	2.1	2.0
7	.....	2.3	2.2	2.0	2.0	23	9.7	2.6	2.05	2.1	2.3
8	.....	2.2	2.1	2.0	2.0	24	7.0	2.5	2.1	2.0	2.2
9	.....	2.2	2.1	2.0	2.0	25	4.0	2.4	2.0	2.0	2.1
10	.....	2.2	2.2	2.0	2.4	26	3.4	2.4	2.0	2.0	2.0
11	.....	2.5	2.2	2.0	2.3	27	6.5	2.3	2.0	2.0	3.0
12	.....	2.3	2.1	2.0	2.2	28	6.3	2.5	2.0	2.3	5.0
13	4.6	2.3	2.2	2.0	2.2	29	6.3	2.7	2.0	2.2	10.0
14	4.1	2.2	2.2	2.0	3.0	30	4.5	2.5	2.0	2.2	12.0
15	4.1	2.1	2.3	2.0	5.0	31	3.4	.....	2.0	.....	9.5
16	6.1	2.2	2.2	2.0	4.0						

Daily gage height, in feet, of Oconee River at Barnett's Shoals.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1902								
1	5.8	8.0	14.0	.....	.....	2.2	1.5	1.6
2	4.0	14.0	8.0	.....	.....	2.1	1.5	1.6
3	3.0	10.0	6.0	.....	.....	2.1	1.5	2.4
4	2.9	8.9	5.0	.....	.....	2.1	2.6	2.4
5	2.8	7.6	4.5	.....	.....	2.0	2.7	3.9
6	2.7	6.0	4.0	.....	.....	2.0	1.8	2.5
7	2.6	4.8	3.6	.....	.....	2.2	1.8	1.9
8	2.5	3.9	3.0	.....	.....	3.0	1.9	1.7
9	2.4	3.3	.....	.....	.....	2.3	1.7	1.6
10	2.4	3.0	.....	.....	.....	2.2	1.9	1.6
11	2.4	2.8	.....	.....	.....	2.1	2.5	1.8
12	2.4	2.7	.....	.....	.....	2.1	2.4	2.4
13	2.4	2.7	.....	.....	.....	1.9	3.2	1.8
14	2.3	2.7	.....	.....	.....	1.8	2.2	1.6
15	2.3	3.0	.....	.....	.....	1.9	4.3	1.8
16	2.3	3.3	.....	.....	.....	2.5	4.3	1.6
17	2.3	3.3	.....	.....	.....	2.2	2.5	1.7
18	2.3	3.2	.....	.....	.....	2.1	2.0	1.7
19	2.4	3.0	.....	.....	.....	2.0	1.9	1.5
20	2.3	2.8	.....	.....	2.2	2.7	1.8	1.7
21	2.5	2.6	.....	.....	2.2	2.0	1.7	1.8
22	2.4	2.6	.....	.....	2.2	1.8	1.7	1.9
23	2.3	2.5	.....	.....	2.2	1.8	1.6	1.6
24	2.6	2.5	.....	.....	2.3	1.7	1.6	.....
25	2.5	2.5	.....	.....	2.3	1.7	1.6	.....
26	2.4	2.5	.....	.....	2.3	1.7	1.8	.....
27	2.5	8.0	.....	.....	2.2	1.7	1.7	.....
28	2.6	17.0	.....	.....	2.1	1.6	1.7	.....
29	2.9	.....	.....	.....	2.1	1.7	2.0	.....
30	3.6	.....	.....	.....	2.0	1.7	1.8	.....
31	4.0	.....	.....	.....	2.0	.....	1.7	.....

Rating tables for Oconee River at Barnett Shoals.

AUGUST 13 TO DECEMBER 31, 1901.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.00	780	3.80	1,878	5.60	3,835	8.80	9,946
2.10	824	3.90	1,958	5.70	3,980	9.00	10,350
2.20	870	4.00	2,060	5.80	4,130	9.50	11,360
2.30	918	4.10	2,145	5.90	4,285	10.00	12,370
2.40	968	4.20	2,233	6.00	4,445	10.50	13,380
2.50	1,020	4.30	2,324	6.20	4,780	11.00	14,390
2.60	1,074	4.40	2,418	6.40	5,135	11.50	15,400
2.70	1,130	4.50	2,515	6.60	5,510	12.00	16,410
2.80	1,188	4.60	2,615	6.80	5,906	12.50	17,420
2.90	1,248	4.70	2,719	7.00	6,310	13.00	18,430
3.00	1,310	4.80	2,827	7.20	6,714	13.50	19,440
3.10	1,374	4.90	2,939	7.40	7,118	14.00	20,450
3.20	1,440	5.00	3,055	7.60	7,522	15.00	22,470
3.30	1,508	5.10	3,175	7.80	7,926	16.00	24,490
3.40	1,578	5.20	3,299	8.00	8,330	17.00	26,510
3.50	1,650	5.30	3,427	8.20	8,734		
3.60	1,724	5.40	3,559	8.40	9,138		
3.70	1,800	5.50	3,695	8.60	9,542		

JANUARY 1 TO AUGUST 23, 1902.[b]

1.50	520	1.80	665	2.10	813	2.40	967
1.60	568	1.90	713	2.20	864	2.50	1,020
1.70	616	2.00	763	2.30	915		

[a] Above gage height 6.8 feet the rating curve is a tangent, the difference being 202 per tenth.
[b] Above gage height 2.50 feet this table is the same as the 1901 table.

Estimated monthly discharge of Oconee River at Barnett Shoals.

[Drainage area, 835 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1901					
August 13–31	11,760	1,578	4,092	4.90	3.46
September	9,542	824	1,763	2.11	2.35
October	1,958	780	916	1.10	1.27
November	918	780	801	.96	1.07
December	16,410	780	2,294	2.75	3.17
1902					
January	4,130	915	1,211	1.45	1.67
February	26,510	1,020	4,456	5.34	5.56
March 1–8	20,450	1,310	5,486	6.57	1.95
May 20–31	915	763	851	1.02	.46
June	1,310	568	748	.90	1.00
July	2,324	520	842	1.01	1.16
August 1–23	1,958	520	736	.88	.75

OCONEE RIVER NEAR GREENSBORO.

This station was established July 25, 1903, by M. R. Hall. It is located at the new wagon bridge, about 5 miles west of Greensboro, on the road to Madison.

Ordinarily the river is about 120 feet wide, with sandy and shifting bed. The channel is nearly straight, and the current is regular. The right bank is high and rocky, with the exception of a low bench under the bridge and approach. The left bank is low and will overflow at a gage height of about 12 to 15 feet to the end of the approach for a distance of about 600 feet and at extreme high water may pass beyond the end of the approach.

Discharge measurements are made from the downstream side of the bridge, the initial point for soundings being the end of the iron trestle on the right bank, downstream side. The bridge is of two spans: The first span from the right bank is 80 feet long, and is not over the water except at time of floods; the main span over the river is 144 feet long. There are also 52 feet of iron trestle and about 40 feet of wooden trestle on the right bank, and 253 feet of iron trestle and about 325 feet of wooden trestle on the left bank.

A standard chain gage is fastened to the lower chord of the downstream side of the bridge 163 to 165 feet from the initial point for soundings; length of chain, 38.73 feet. The gage is read once each day by M. A. Stevens, except during three months of the low-water period, when it is read twice each day. Bench marks were established as follows: (1) The top of the downstream end of the second

floor beam from the right-bank pier; elevation, 36.00 feet; (2) a copper plug set in the rock under the upstream side of the bridge opposite a point 84 feet from the initial point for soundings; elevation, 13.55 feet.

Discharge measurements of Oconee River near Greensboro.

Date	Gage height	Discharge	Date	Gage height	Discharge
1903	*Feet*	*Sec.-ft.*	1905	*Feet*	*Sec.-ft.*
June 12	4.00	1,521	March 23	2.32	826
July 25	1.75	733	May 11	2.48	886
August 28	1.70	666	June 8	1.36	519
October 9	1.70	690	June 8	1.30	514
December 2	1.66	725	September 7	.77	338
1904			September 7	.74	331
February 19	2.75	1,066	October 30	.74	328
March 19	2.75	1,023	October 30	.73	325
May 12	1.90	753	November 25	1.03	407
June 9	1.57	617	1906		
July 18	.99	455	February 10	3.62	1,310
August 9	9.82	5,017	April 28	4.35	1,710
August 9	10.49	5,435	June 28	2.13	835
September 21	.45	297	August 17	5.75	2,500
September 21	.45	301	October 17	2.70	961
October 13	0.51	302			
October 13	.50	291			
November 26	1.35	523			
November 26	1.28	494			

Daily gage height, in feet, of Oconee River near Greensboro.

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903							1903						
1		1.9	1.6	1.6	1.6	1.8	17		4.1	8.9	1.8	1.9	1.8
2		4.5	1.4	1.5	1.6	1.7	18		9.6	6.8	1.7	1.7	1.7
3		6.9	1.4	1.5	1.8	1.6	19		13.2	5.2	1.7	1.9	1.7
4		5.6	1.4	1.5	3.7	1.5	20		5.8	2.6	1.6	2.0	1.6
5		4.0	1.4	1.5	2.8	1.5	21		3.5	2.1	1.6	2.1	1.6
6		2.9	1.3	1.5	3.7	1.6	22		2.9	2.2	1.5	1.8	1.8
7		2.2	1.3	1.6	2.6	1.6	23		2.6	2.0	1.5	1.6	1.8
8		2.1	1.2	1.8	2.4	1.8	24		2.1	1.9	1.5	1.6	2.4
9		1.9	1.2	1.7	2.1	2.0	25		1.9	1.8	1.5	1.9	2.2
10		2.5	1.7	1.7	2.1	1.9	26	1.6	1.9	1.8	1.5	1.9	2.2
11		2.1	1.8	1.4	1.9	1.9	27	1.6	1.8	1.7	1.5	1.8	2.0
12		1.5	1.4	1.4	1.9	1.8	28	1.7	1.8	1.6	1.4	1.7	2.1
13		1.5	.9	1.3	1.8	1.7	29	1.6	1.6	1.6	1.3	1.6	2.0
14		4.1	1.2	1.2	1.8	1.7	30	2.0	1.5	1.6	1.3	1.6	1.8
15		2.5	1.8	1.3	1.9	1.9	31	2.4	1.5	.....	1.5	.....	1.8
16		5.0	10.2	1.5	1.7	2.0							

Daily gage height, in feet, of Oconee River near Greensboro—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
1	1.8	2.0	3.1	2.6	1.8	3.1	2.5	2.6	1.5	0.4	0.7	1.4
2	1.8	2.2	2.8	2.6	1.8	2.6	1.7	2.7	1.5	.8	.8	1.4
3	2.0	2.3	3.0	2.4	1.7	2.0	1.5	2.4	1.7	.8	.8	1.8
4	1.8	2.4	3.4	2.8	1.5	1.4	1.0	2.0	2.0	.4	1.2	1.7
5	1.8	2.5	3.4	2.3	1.5	1.2	.9	1.4	3.8	.6	1.3	1.9
6	1.6	2.5	3.4	2.2	1.6	1.0	.9	3.4	2.8	.5	1.0	4.4
7	1.7	2.3	6.0	2.7	1.6	1.0	.8	3.2	1.9	.4	.9	4.7
8	1.8	5.1	7.9	2.8	1.6	1.8	.8	3.7	1.8	.4	.9	2.8
9	1.8	5.5	7.6	3.8	1.7	1.3	1.1	9.3	1.2	.3	.7	2.2
10	1.9	4.0	4.3	3.0	1.8	1.2	1.0	11.9	1.0	.2	.6	1.9
11	2.0	3.5	3.8	2.5	4.5	1.1	1.7	10.0	1.0	.6	.6	2.0
12	2.0	6.2	3.6	2.4	2.0	2.3	1.5	5.3	.9	.6	.6	2.0
13	2.1	4.2	3.4	2.2	2.0	1.3	1.1	3.8	.9	.5	1.6	1.8
14	2.0	3.9	3.1	2.1	1.8	1.2	.9	2.8	.9	.5	1.4	1.7
15	2.0	3.3	4.8	2.2	1.8	1.1	.8	2.4	.8	.2	1.2	1.7
16	1.9	3.2	3.5	2.1	1.7	.9	.7	3.9	.7	.1	1.2	1.5
17	2.5	2.8	3.2	2.2	1.8	.9	.7	2.7	.7	.2	1.2	1.8
18	2.0	2.7	2.8	2.2	1.6	1.0	.7	2.1	.6	.2	1.1	1.8
19	2.0	3.0	2.7	2.3	1.5	.9	.7	1.7	.6	.4	1.1	1.7
20	1.8	4.7	2.5	2.0	1.3	.7	.7	1.6	.6	.4	1.0	1.7
21	2.2	4.9	2.7	2.0	1.2	1.2	.8	1.5	.5	.5	.8	1.5
22	2.0	6.7	3.7	2.0	1.2	2.1	1.7	1.6	.5	.5	.8	1.5
23	2.2	5.2	4.3	2.4	1.1	1.5	1.2	1.5	.5	.6	1.0	1.5
24	4.7	4.8	3.7	2.0	1.1	1.4	1.0	1.5	.5	.1	1.5	1.4
25	4.8	4.5	3.4	2.0	1.0	1.0	1.1	1.4	.4	.1	1.8	1.2
26	3.0	4.0	3.3	2.0	1.0	1.0	1.1	1.3	.4	.2	1.4	1.2
27	2.5	3.4	3.6	3.5	.9	.9	1.0	1.8	.5	.1	1.2	1.4
28	2.4	3.4	3.1	3.0	1.0	.7	1.0	1.8	.6	.8	1.0	3.3
29	2.3	3.0	2.8	2.8	1.1	1.0	.9	1.8	.5	.6	1.0	3.8
30	2.3	.....	2.7	2.6	1.2	2.7	.8	1.6	.4	.5	1.3	2.8
31	2.1	.....	2.6	.....	2.8	.....	3.7	1.6	.....	.4	.....	2.2
1905 a												
1	2.2	1.9	3.2	2.1	2.0	2.3	2.2	1.4	1.25	.4	.7	1.3
2	2.1	2.0	3.1	2.1	2.0	2.0	2.0	1.3	1.85	.15	.65	1.1
3	2.0	2.0	2.9	1.9	2.6	2.0	6.8	1.3	1.3	.85	.7	8.1
4	1.9	2.1	2.8	2.0	4.1	1.8	2.8	1.0	1.1	1.55	.65	11.6
5	1.7	2.2	2.8	2.1	5.4	1.7	2.1	.7	1.4	1.3	.55	13.3
6	1.5	2.4	2.7	2.1	4.5	1.7	3.0	.4	1.15	1.15	.6	11.2
7	2.0	2.0	2.7	2.4	5.6	1.6	6.0	.3	.9	.85	.7	4.0
8	2.7	4.0	2.6	2.2	4.0	1.4	11.2	.6	.85	.8	.7	3.8
9	2.4	4.8	2.6	2.2	3.6	1.3	5.0	1.4	.8	.9	.95	8.1
10	2.0	6.9	2.7	2.0	3.0	1.1	3.1	4.3	.65	1.05	1.2	11.8
11	1.9	7.2	2.6	2.0	2.5	1.1	2.8	3.4	.40	1.25	2.55	12.4
12	1.5	8.0	2.6	2.1	2.2	1.2	5.1	4.4	.9	.95	2.0	8.2
13	3.0	11.4	2.7	2.0	2.0	1.2	4.4	4.6	1.1	1.25	1.85	5.4
14	8.5	12.5	3.2	2.0	1.9	1.5	4.3	4.3	.95	1.2	1.7	3.4
15	6.2	10.7	3.0	1.9	1.6	1.5	3.6	5.4	.95	.9	1.35	4.2
16	4.3	6.2	2.6	2.0	2.0	1.6	2.9	5.6	.8	.85	1.25	4.5
17	3.7	4.9	2.6	2.0	2.0	2.2	2.1	5.6	.65	1.1	1.2	3.9
18	2.7	4.0	2.4	1.9	2.0	2.0	2.0	4.6	.35	1.05	1.05	3.4
19	2.5	3.7	2.4	1.8	1.7	1.8	1.7	2.2	.8	1.05	1.0	3.2
20	2.5	4.2	2.4	1.8	1.5	1.8	1.8	2.4	.8	1.05	1.05	4.0
21	2.5	8.1	2.8	1.7	1.6	1.7	1.8	1.7	.6	.95	1.15	12.7
22	2.3	9.6	2.7	1.7	1.6	1.6	1.7	1.7	.6	.50	1.25	14.0
23	2.3	10.3	2.4	1.8	2.0	2.7	1.4	1.5	.55	.45	1.3	10.5
24	2.1	7.0	2.4	1.8	7.5	2.8	1.6	1.7	.35	.7	1.3	6.6
25	1.9	5.2	2.3	1.7	6.5	2.4	1.9	3.4	.20	.75	1.3	5.8

Daily gage height, in feet, of Oconee River near Greensboro—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905 a												
26	1.7	4.2	2.3	1.7	4.1	2.0	1.9	4.4	.50	.8	1.35	4.6
27	1.7	3.5	2.1	1.7	3.2	1.5	1.8	2.2	.45	.8	1.4	3.6
28	1.5	3.2	2.3	1.7	2.8	1.5	1.5	1.75	.4	.75	1.8	3.4
29	1.8	.....	2.3	1.6	2.6	1.8	1.4	1.6	.45	.7	1.4	4.0
30	1.7	.....	2.2	1.7	2.5	2.0	1.2	1.15	.5	.55	1.3	4.0
31	1.9	.....	2.1	.....	2.3	.....	1.0	1.1	.....	.6	.....	3.8
1906												
1	3.5	5.1	3.6	5.6	3.4	2.0	1.8	8.4	5.6	3.5	2.5	2.3
2	3.5	5.0	3.6	5.4	3.0	1.8	4.9	8.4	3.6	5.7	2.5	2.3
3	3.8	4.9	3.8	5.4	2.7	4.3	2.6	3.7	2.8	6.1	2.4	2.3
4	13.9	4.5	3.5	5.2	2.9	5.6	3.3	9.5	2.6	8.7	2.4	2.3
5	16.3	3.8	3.4	5.0	2.9	3.3	2.1	7.7	2.3	10.2	2.3	2.2
6	16.8	3.6	3.2	4.0	2.9	2.3	2.0	6.2	2.4	9.3	2.4	2.3
7	12.5	3.8	2.0	4.1	5.2	2.1	2.1	5.2	3.6	5.8	2.5	2.6
8	9.3	4.0	2.8	3.6	4.6	2.0	6.5	3.7	2.6	4.2	2.4	2.4
9	5.1	3.8	4.3	3.4	3.7	1.7	7.6	3.1	2.2	3.6	2.4	2.3
10	4.8	3.7	8.2	5.5	3.0	2.3	8.2	2.8	2.2	3.4	2.4	2.3
11	4.5	3.7	4.9	4.0	2.6	2.0	4.5	2.6	2.7	3.2	2.3	4.1
12	4.7	3.5	4.5	3.7	2.5	3.7	3.7	2.5	2.6	3.0	2.6	4.9
13	5.2	3.5	3.0	3.7	2.5	8.6	3.1	2.6	5.6	2.9	2.5	4.0
14	5.2	3.3	2.8	4.0	2.4	10.8	2.6	3.4	3.7	2.8	2.6	3.1
15	5.1	3.2	8.6	4.1	2.3	12.3	7.4	5.2	2.5	2.8	2.9	2.8
16	4.3	3.1	13.5	4.2	2.3	10.4	7.9	5.7	2.2	2.8	2.8	2.7
17	4.3	3.1	16.3	3.5	2.2	11.3	7.5	5.3	2.0	2.7	2.7	2.7
18	4.0	3.0	15.2	3.2	2.2	7.4	10.3	4.1	2.3	2.7	3.8	3.3
19	3.4	3.0	10.1	3.1	2.1	4.5	12.3	4.3	5.3	3.7	3.7	4.3
20	3.6	2.9	14.9	3.0	2.0	3.4	9.9	5.1	3.4	4.3	3.4	4.9
21	3.6	2.9	18.5	3.0	1.9	3.1	5.4	6.3	3.4	3.5	2.9	4.9
22	6.5	3.4	18.1	2.9	2.3	2.8	3.8	8.2	8.0	3.0	2.8	4.1
23	16.5	3.0	10.5	2.8	2.1	2.6	8.2	5.9	6.1	2.9	2.8	3.4
24	18.9	3.0	6.1	2.7	1.9	2.2	7.5	4.0	4.0	2.7	2.6	3.1
25	16.2	3.0	6.0	2.6	1.9	2.2	5.0	3.4	4.8	2.7	2.5	2.9
26	11.3	3.9	5.8	2.6	2.3	3.0	4.3	4.0	4.1	2.7	2.5	2.8
27	10.4	3.8	5.5	2.5	2.6	2.4	3.0	4.6	5.8	2.5	2.5	2.7
28	9.8	3.8	5.8	4.2	3.2	2.3	2.9	4.7	5.9	2.5	2.4	2.6
29	8.6	.....	5.6	4.7	2.3	2.1	3.5	4.9	5.3	2.5	2.4	4.0
30	7.0	.....	5.6	4.2	2.2	2.0	6.9	5.8	3.8	2.8	2.2	3.6
31	6.3	.....	5.5	.....	1.9	.....	11.0	4.9	.....	2.5	.....	5.8

a On account of a daily fluctuation caused by developed powers above, two readings a day were made during the last four months of 1905. The low days during this period can be attributed to stored water, and do not represent the natural flow.

Rating table for Oconee River near Greensboro.

JULY 26, 1903, TO DECEMBER 31, 1904.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.10	215	1.20	510	2.60	996	6.00	2,550
.20	235	1.30	540	2.80	1,068	6.50	2,830
.30	255	1.40	570	3.00	1,140	7.00	3,120
.40	280	1.50	605	3.20	1,220	8.00	3,740
.50	305	1.60	640	3.40	1,300	9.00	4,410
.60	330	1.70	675	3.60	1,384	10.00	5,100
.70	360	1.80	710	3.80	1,472	11.00	5,830
.80	390	1.90	745	4.00	1,560	12.00	6,600
.90	420	2.00	780	4.50	1,780		
1.00	450	2.20	852	5.00	2,020		
1.10	480	2.40	924	5.50	2,280		

JANUARY I TO DECEMBER 31, 1905.[a]

0.20	195	1.90	690	3.60	1,340	6.60	2,880
.30	220	2.00	725	3.70	1,385	6.80	3,000
.40	245	2.10	760	3.80	1,430	7.00	3,120
.50	270	2.20	795	3.90	1,475	7.20	3,240
.60	295	2.30	830	4.00	1,520	7.40	3,360
.70	320	2.40	865	4.20	1,620	7.60	3,480
.80	345	2.50	900	4.40	1,720	7.80	3,610
.90	375	2.60	935	4.60	1,820	8.00	3,740
1.00	405	2.70	970	4.80	1,920	8.50	4,065
1.10	435	2.80	1,010	5.00	2,020	9.00	4,410
1.20	465	2.90	1,050	5.20	2,120	9.50	4,760
1.30	495	3.00	1,090	5.40	2,220	10.00	5,110
1.40	525	3.10	1,130	5.60	2,330	11.00	5,840
1.50	555	3.20	1,170	5.80	2,440	12.00	6,590
1.60	585	3.30	1,210	6.00	2,550	13.00	7,340
1.70	620	3.40	1,250	6.20	2,660	14.00	8,090
1.80	655	3.50	1,295	6.40	2,770		

a Above gage height 10.4 feet the rating curve is a tangent, the difference being 75 per tenth.

JANUARY I TO DECEMBER, 1906.

Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.70	620	3.00	1,090	4.30	1,670	6.20	2,660
1.80	655	3.10	1,130	4.40	1,720	6.40	2,770
1.90	690	3.20	1,170	4.50	1,770	6.60	2,880
2.00	725	3.30	1,210	4.60	1,820	6.80	3,000
2.10	760	3.40	1,250	4.70	1,870	7.00	3,120
2.20	795	3.50	1,295	4.80	1,920	8.00	3,740
2.30	830	3.60	1,340	4.90	1,970	9.00	4,410
2.40	865	3.70	1,385	5.00	2,020	10.00	5,110
2.50	900	3.80	1,430	5.20	2,120	11.00	5,840
2.60	935	3.90	1,475	5.40	2,220	12.00	6,590
2.70	970	4.00	1,520	5.60	2,330		
2.80	1,010	4.10	1,570	5.80	2,440		
2.90	1,050	4.20	1,620	6.00	2,550		

NOTE.—The last table is based on discharge measurements made during 1903–1906 and is well defined below gage height 10.5 feet. Above gage height 10.4 feet the rating curve is a tangent, the difference being 75 per tenth.

Estimated monthly discharge of Oconee River near Greensboro.

[Drainage area, 1,100 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft per sq. mile	Depth in inches
1903					
July (26 31)	924	640	716	0.651	0.145
August	7,450	605	1,481	1.35	1.56
September	5,244	420	1,051	.965	1.07
October	710	510	610	.555	.640
November	1,428	640	790	.718	.801
December	924	605	718	.653	.753
1904					
January	1,924	640	868	.789	.910
February	4,070	780	1,576	1.43	1.54
March	3,676	960	1,464	1.33	1.53
April	1,472	780	941	.855	.954
May	1,780	420	656	.596	.687
June	1,180	360	578	.525	.586
July	1,428	360	508	.462	.533
August	6,522	540	1,348	1.23	1.42
September	1,472	280	481	.437	.488
October	390	215	278	.253	.292
November	710	330	468	.425	.474
December	1,876	510	812	.738	.851
The year	6,522	215	832	.756	10.26
1905 a					
January	4,065	555	970	0.882	1.02
February	6,965	690	2,497	2.27	2.36
March	1,170	760	937	.852	.982
April	865	585	698	.635	.708
May	3,420	555	1,156	1.05	1.215
June	1,010	435	646	.587	.65
July	5,990	405	1,195	1.09	1.26
August	2,330	220	978	.889	1.02
September	672	195	348	.316	.353
October	570	185	372	.338	.390
November	918	282	470	.427	.476
December	8,090	435	3,086	2.81	3.24
The year	8,090	185	1,113	1.01	13.67
1906					
January	11,800	1,250	4,100	3.73	4.30
February	2,070	1,010	1,330	1.21	1.26
March	11,500	725	3,640	3.31	3.82
April	2,330	900	1,480	1.35	1.51
May	2,120	690	971	.883	1.02
June	6,820	620	1,860	1.69	1.89
July	6,820	655	2,480	2.25	2.59
August	4,760	900	2,120	1.93	2.22
September	4,000	725	1,670	1.52	1.70
October	5,250	900	1,590	1.45	1.67
November	1,430	795	955	.868	.97
December	2,440	795	1,210	1.10	1.27
The year	11,800	620	1,950	1.77	24.22

a For minimum flow in 1905 see note to gage-height table.

NOTE.—Values for 1906 are excellent.

OCONEE RIVER AT CAREY.

This station, which was established October 29, 1896, is located at an iron girder deck bridge on the Georgia Railroad at the station of Carey, 6 miles west of Greensboro, and just below the junction of the Apalachee and Oconee rivers.

Both banks are low and liable to overflow under the trestles to the end of embankments. The bed of the stream is rocky and the current good.

The top of the iron girder 20 feet from the left-bank end of the bridge on the downstream side is 41.13 feet above the datum of the gage heights.

The rating was evidently affected by the dam several miles below, and for this reason the station was abandoned March 31, 1898.

Discharge measurements of Oconee River at Carey.

Date	Gage height	Discharge	Date	Gage height	Discharge
1896	*Feet*	*Sec-ft.*	1897	*Feet*	*Sec.-ft*
October 29	1.68	644	June 9	2.50	1,885
November 17	2.08	836	July 30	1.80	1,103
November 25	1.90	795	October 4	1 08	381
1897			November 11	1.92	678
January 18	4.90	3,318	December 14	2.30	1,117
March 18	5.15	4,257	1898		
April 29	2.40	1,992	March 22	2.50	1,168
May 28	2.10	1,047	November 15	3.65	2,386

Daily gage height, in feet, of Oconee River at Carey.

Day	Nov.	Dec.	Day	Nov.	Dec.	Day	Nov.	Dec.	Day	Nov.	Dec.
1896			1896			1896			1896		
1	2.1	5.1	9	1.8	2.9	17	2.08	2.4	25	1.9	2.0
2	1.9	4.8	10	1.8	2.7	18		2.2	26	1.9	2.1
3	1.7	4.4	11	1.8	2.6	19		2.4	27	1.8	2.0
4	2.1	4.2	12	1.9	2.5	20		2.3	28	1.9	1.9
5	2.7	3.7	13	1.8	2.4	21		2.2	29	2.9	2.1
6	2.3	3.4	14	1.9	2.3	22		2.2	30	3.9	2.0
7	2.2	3.2	15	1.9	4.0	23		2.1	31		2.0
8	1.8	3.0	16	2.0	2.8	24		2.0			

Daily gage height, in feet, of Oconee River at Carey.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897												
1	2.1	2.5	3.2	3.3	4.0	2.1	1.6	1.6	1.5	.....	2.0	2.7
2	1.9	3.8	3.2	4.9	3.8	2.1	1.5	1.5	1.2	1.5	2.2	2.4
3	2.1	3.7	3.1	6.1	3.3	2.1	1.1	1.5	1.2	1.4	2.4	2.2
4	2.0	3.6	3.9	5.6	2.8	2.2	1.1	1.5	1.4	1.1	2.0	2.6
5	2.1	3.3	3.0	14.4	2.6	2.2	1.5	1.4	1.3	1.2	1.9	2.8
6	2.0	4.6	2.9	14.4	2.5	2.3	2.7	1.9	1.2	1.4	1.8	2.7
7	2.1	5.0	6.4	12.4	2.3	2.2	2.6	2.4	a .8	1.3	1.8	2.5
8	2.1	4.6	7.8	7.3	2.3	2.2	2.2	2.4	a .5	1.2	1.8	2.5
9	1.8	3.8	6.8	5.4	2.3	2.5	1.6	2.2	a .3	1.3	1.8	2.4
10	1.9	3.3	4.4	5.5	2.3	2.3	1.8	2.1	a .3	2.9	1.9	2.3
11	2.0	3.1	4.0	4.5	2.2	2.2	1.8	2.0	a .2	2.8	1.7	2.3
12	1.9	5.9	4.2	4.0	2.3	2.0	2.2	1.7	a .2	2.7	1.8	2.1
13	2.0	6.6	7.7	3.5	2.3	1.8	1.7	1.5	a .1	2.6	1.8	2.0
14	2.7	5.3	10.4	3.5	2.4	1.7	1.6	1.4	a .3	2.3	1.7	2.3
15	4.3	4.4	12.2	3.3	2.3	1.7	1.1	1.2	a .4	1.9	1.7	2.5
16	4.2	4.0	11.6	3.3	2.3	1.6	.7	1.1	a .7	1.9	1.7	2.4
17	3.4	4.2	8.6	3.3	2.3	1.6	.7	2.9	1.5	1.8	1.8	2.3
18	4.5	3.6	5.5	3.0	2.2	1.6	1.8	3.1	1.4	1.6	1.9	2.1
19	4.8	3.3	4.2	2.9	2.2	1.8	3.7	3.2	1.8	1.9	1.6	2.0
20	4.0	3.0	5.3	2.8	2.2	2.4	5.6	4.1	1.5	2.1	1.8	2.0
21	6.0	3.8	5.5	2.7	2.0	2.1	5.6	3.0	1.4	2.1	1.8	2.2
22	7.8	4.0	4.6	2.7	1.9	2.0	5.8	3.7	1.4	2.0	1.8	2.3
23	6.8	3.8	4.6	2.6	2.0	1.7	5.1	2.8	1.9	2.0	1.9	2.4
24	4.3	4.7	4.7	2.6	2.2	1.5	3.1	2.6	1.8	2.1	1.8	2.4
25	3.3	5.3	4.2	2.7	2.1	2.2	2.4	2.1	1.8	2.0	1.8	2.4
26	3.1	5.2	3.7	2.5	2.1	2.0	2.4	1.8	1.7	2.0	1.7	2.4
27	2.8	4.2	3.2	2.5	2.1	1.8	2.6	1.7	1.7	1.8	2.8	2.5
28	2.8	3.5	3.2	2.5	2.0	1.6	2.3	1.6	1.7	1.8	3.5	2.6
29	2.6	.....	3.0	2.5	2.1	1.5	2.3	1.4	1.7	1.6	2.7	2.3
30	2.4	.....	3.0	2.9	2.1	1.6	1.8	1.4	1.7	1.6	2.7	2.4
31	2.5	.....	3.4	.....	2.2	.....	1.6	1.2	.....	1.8	.....	2.3

Day	Jan.	Feb.	Mar.	Day	Jan.	Feb.	Mar.	Day	Jan.	Feb.	Mar.
1898				1898				1898			
1	2.2	2.7	2.3	12	2.3	2.3	2.3	23	2.4	2.2	2.4
2	2.1	2.5	2.2	13	2.2	2.3	2.2	24	2.4	2.2	2.4
3	2.0	2.4	2.2	14	2.2	2.3	2.6	25	2.5	2.2	2.3
4	2.0	2.4	2.5	15	2.1	2.3	3.5	26	5.0	2.1	2.2
5	2.1	2.5	2.8	16	2.1	2.3	3.9	27	5.7	2.1	2.2
6	2.1	2.4	2.7	17	2.1	2.3	3.5	28	4.5	2.1	2.3
7	2.1	2.4	2.4	18	2.1	2.3	3.9	29	3.5	.....	2.3
8	2.1	2.4	2.4	19	2.0	2.3	3.1	30	3.0	.....	2.3
9	2.0	2.4	2.4	20	2.0	2.3	2.6	31	2.8	.....	2.5
10	2.1	2.4	2.3	21	2.7	2.3	2.4				
11	2.2	2.4	2.3	22	2.7	2.3	2.5				

a The low gage heights from September 7 to 16, 1897, inclusive, were caused not by a diminution of the flow of the stream, but by the drawing off of a dam several miles below.

Rating table for Oconee River at Carey, from October 29, 1896, to March 31, 1898.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.00	240	1.60	560	3.20	1,848	4.80	3,450
0.20	260	1.80	675	3.40	2,024	5.00	3,750
0.40	290	2.00	815	3.60	2,200	5.20	4,080
0.60	320	2.20	970	3.80	2,376	5.40	4,500
0.80	350	2.40	1,144	4.00	2,554	5.60	4,950
1.00	380	2.60	1,320	4.20	2,750	5.80	5,410
1.20	415	2.80	1,496	4.40	2,965	6.00	5,870
1.40	470	3.00	1,672	4.60	3,200	7.00	8,170

Estimated monthly discharge of Oconee River at Carey.

[Drainage area, 1,346 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1896 *a*					
November *b*	2,464	615	882	0.66	0.74
December	3,910	740	1,498	1.11	1.28
1897					
January	10,000	675	2,114	1.57	1.81
February	7,250	1,232	2,905	2.16	2.25
March 1-13, 18-31	10,000	1,584	3,482	2.59	2.61
April 9-30	4,720	1,232	1,955	1.45	1.19
May	2,554	740	1,130	.84	.97
June	1,232	510	800	.59	.65
July	5,410	335	1,358	1.01	1.16
August	2,650	415	948	.70	.81
September	740	*c* 250	460	.34	.38
October	1,584	395	740	.55	.63
November	2,112	560	829	.62	.69
December	1,496	815	1,116	.83	.95
1898					
January	5,180	815	1,340	1.00	1.15
February	1,408	890	1,079	.80	.83
March	2,464	970	1,300	.97	1.12

a These estimates have been revised on the basis of the 1897 rating curve.

b Discharge interpolated November 18 to 24, 1896.

c The low-water height reported at Carey from September 7 to September 16, 1897, was probably caused by the opening for repairs of a dam 2 or 3 miles below this point. An inspection of the conditions at Macon and other stations shows that this period did not include the lowest water of the year but that the minimum occurred during the first two weeks in October. Leaving out of account this period of sudden apparent low water, the lowest gage reading at Carey was 1.10 on October 4. A measurement made on that day at 1.08 showed a discharge of 381 second-feet.

OCONEE RIVER AT FRALEYS FERRY, NEAR MILLEDGEVILLE.

This station is located at Fraleys Ferry, about 6 miles above Milledgeville, and about 4 miles below the mouth of Little River. This point being above the dam at Milledgeville, the river has a nearly natural flow, being but slightly affected by the dams a great distance upstream.

The channel is straight for some distance above and below the station. The current is moderate or slow at low stages. The bed is sandy and changing, but the rock shoals below will probably control the water level at the station.

Discharge measurements are made from the ferryboat or from a small boat controlled by the ferry cable along which the distances are marked. Measurements can be made at low and medium stages only, as the current is too great for safety in boat measurements at the higher stages.

During a short period in October and November, 1905, gage-height records were maintained by Charles F. Howe, who put in a temporary gage and has furnished the records to the Geological Survey. These gage heights, which are the mean of four readings daily, and the discharge measurements which were made, form a much more accurate basis for estimating the flow for the period which they cover than the records for the station at Milledgeville, 6 miles below. The bench mark is a nail driven horizontally into an ash tree on the right bank about 200 feet above the ferry; elevation, 10.00 feet above the datum of the gage.

Discharge measurements of Oconee River at Fraleys Ferry, near Milledgeville.

Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*
June 29	4.90	1,030
September 20	4.35	547
1905		
November 24	5.02	985
1906		
May 23	5.59	1,540
October 12	6.02	2,260

Daily gage height, in feet, of Oconee River at Fraleys Ferry, near Milledgeville.

Day	Oct.	Nov.	Day	Oct.	Nov.	Day	Oct.	Nov.
1905			1905			1905		
1	.....	4.85	12	.....	6.0	22	4.65	.....
2	.....	4.85	13	.....	5.6	23	4.55	.....
3	.....	4.75	14	.....	5.2	24	4.55	.....
4	.....	4.7	15	.....	.....	25	4.45	.....
5	.....	4.7	16	.....	.....	26	4.8	.....
6	.....	4.6	17	.....	.....	27	4.8	.....
7	.....	4.65	18	.....	.....	28	4.85	.....
8	.....	4.8	19	.....	.....	29	.....	.....
9	.....	4.85	20	4.7	.....	30	4.8	.....
10	.....	5.0	21	4.7	.....	31	4.85	.....
11	.....	6.0						

Daily gage height, in feet, of Oconee River at Fraleys Ferry, near Milledgeville. Continued.

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906								
1	.....	5.4	5.6	8.8	6.8	7.2	5.6	5.6
2	.....	5.4	5.6	8.2	7.2	(a)	5.6	5.6
3	.....	5.6	6.0	7.5	6.8	(a)	5.6	5.7
4	.....	6.8	6.8	7.7	6.0	8.7	5.6	5.7
5	.....	6.8	6.3	7.9	5.8	8.4	5.6	5.6
6	.....	5.9	5.6	7.3	5.6	8.8	5.6	5.7
7	.....	5.6	6.4	7.0	5.5	8.0	5.6	5.8
8	.....	5.6	6.9	6.6	5.5	7.0	5.6	5.8
9	.....	5.5	8.6	6.3	5.5	6.4	5.6	5.7
10	.....	5.6	8.8	6.0	5.4	6.2	5.6	5.8
11	.....	5.6	7.4	5.8	5.6	6.2	5.6	5.9
12	.....	5.9	6.3	5.8	5.6	6.0	5.7	6.5
13	.....	(a)	6.2	6.0	6.6	6.0	5.8	6.4
14	.....	(a)	7.0	6.4	6.6	5.9	5.7	6.1
15	.....	(a)	7.9	7.4	6.0	5.9	5.9	6.0
16	.....	(a)	8.2	7.8	5.5	5.9	6.0	5.8
17	.....	(a)	7.9	8.2	5.4	5.8	6.1	5.9
18	.....	(a)	8.4	7.0	5.9	5.9	6.1	6.0
19	.....	8.6	11.0	6.4	7.2	6.0	6.4	7.3
20	.....	7.4	8.2	6.8	8.0	6.4	6.6	7.4
21	.....	6.6	7.2	7.8	8.0	6.2	6.2	7.0
22	.....	7.0	7.4	7.1	7.8	6.0	6.0	6.7
23	5.6	6.8	7.2	6.8	7.0	5.9	5.9	6.4
24	5.5	6.0	8.0	6.6	7.1	5.8	5.8	6.2
25	5.5	5.8	7.2	6.2	7.1	5.8	5.8	6.0
26	5.6	5.8	6.6	6.2	6.6	5.8	5.7	5.9
27	5.8	6.2	6.2	5.4	7.2	5.8	5.6	5.9
28	6.0	5.9	6.0	7.2	7.5	5.7	5.6	5.9
29	5.9	5.6	6.6	6.8	7.0	5.6	5.7	6.6
30	5.7	5.6	8.5	7.0	6.6	5.6	5.6	6.8
31	5.5	.....	8.8	6.8	.....	5.6	.....	7.6

a Water over the gage.

Rating table for Oconee River at Fraleys Ferry near Milledgeville, for 1905-6.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
4.30	530	5.00	1,000	5.70	1,770	6.40	2,860
4.40	580	5.10	1,090	5.80	1,900	6.50	3,040
4.50	640	5.20	1,190	5.90	2,040	6.60	3,220
4.60	700	5.30	1,290	6.00	2,190	6.70	3,410
4.70	770	5.40	1,400	6.10	2,350	6.80	3,600
4.80	840	5.50	1,520	6.20	2,520	6.90	3,800
4.90	920	5.60	1,640	6.30	2,690	7.00	4,000

NOTE.—The above table is based on five discharge measurements made during 1904-1906, and is well defined below gage height 6 feet.

OCONEE RIVER AT MILLEGEVILLE.

This station was established August 22, 1903, by M. R. Hall, though several discharge measurements were made before that time, the first being made October 19, 1895, by C. C. Babb. The bench mark to which the present gage is referred was used for each of these early measurements. The station is located at the iron highway bridge in the eastern part of Milledgeville.

At low water the river is about 300 feet wide, including two piers, and often a sand bar of considerable extent in the third span. This bar sometimes practically stops the third-span channel, leaving the river about 200 feet wide. The bed is sandy and shifting and the water is shallow and swift. These conditions are unfavorable to accurate measurements as well as a constant rating. The channel is only slightly curved. Both banks are high and will not overflow.

Discharge measurements are made from the downstream side of the bridge, the initial point for soundings being the end of the iron bridge at the right bank, downstream side. The bridge consists of four spans, 100 feet, 150 feet, 150 feet, and 80 feet long, respectively, beginning at the right-bank end, and short wooden trestles about 25 feet long at each end.

A standard chain gage, established in August, 1904, is fastened to the intermediate posts on the upstream side of the third panel of the second span from the right bank. The gage is read once each day by J. A. Brooks, who has been paid by the United States Weather Bureau since June 30, 1903. The bottom of the gage box is 43.80 feet above the datum of the gage, and the length of the chain is 45.80 feet. The bench mark is the top of the third floor beam from the pier on the east bank, downstream end; elevation, 39.00 feet above the datum of the gage.

Discharge measurements of Oconee River at Milledgeville.

Date	Gage height	Discharge	Date	Gage height	Discharge
1903	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft.*
August 22	3.95	2,301	June 28	1.14	723
September 11	2.39	1,141	August 18	3.40	2,256
September 12	2.27	1,042	September 19	.95	628
October 16	2.39	1,140	October 11	.37	335
December 16	3.05	1,908	October 11	.41	361
December 18	2.74	1,720	October 12	.49	410
1904			1905		
February 17	3.99	2,852	March 28	2.73	1,867
February 18	3.71	2,449	June 9	1.64	1,064
May 25	1.47	827	September 14	1.20	874
May 26	1.47	857	September 15	.95	712
June 10	2.04	1,218	November 23	1.16	856
June 28	1.12	703			

Daily gage height, in feet, of Oconee River at Milledgeville.[a]

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Day	Aug.	Sept.	Oct.	Nov.	Dec.
1903						1903					
1		2.5	2.5	2.55	2.7	17		17.3	3.5	2.8	2.9
2		2.45	2.5	2.55	2.65	18		8.6	5.7	3.4	2.85
3		2.4	2.4	2.55	2.65	19		5.3	3.6	3.2	2.75
4		2.4	2.4	2.65	2.65	20		3.9	3.0	2.9	2.75
5		2.35	2.4	3.9	2.75	21		3.4	2.9	2.85	3.0
6		2.4	2.3	3.8	2.75	22		3.2	2.75	2.85	2.95
7		2.4	2.25	3.7	2.75	23		3.1	2.65	2.85	2.95
8		2.2	3.1	3.2	2.7	24		3.0	2.6	2.85	3.0
9		3.5	2.65	3.1	2.65	25	3.2	2.9	2.55	2.8	3.0
10		2.5	2.6	2.7	3.4	26	3.1	2.85	2.45	2.8	3.9
11		2.5	2.4	2.85	3.4	27	3.0	2.6	2.4	2.75	3.7
12		2.3	2.25	2.7	3.2	28	2.85	2.6	2.5	2.7	3.3
13		2.1	2.2	2.85	2.95	29	2.75	2.6	2.5	2.7	3.0
14		2.45	2.35	2.85	3.0	30	2.65	2.5	2.5	2.7	2.9
15		3.4	2.8	2.85	3.1	31	2.55		2.55		2.9
16		17.3	2.4	2.8	3.1						

a Owing to the irregular running of the mill above this station during the low-water period, the true mean gage height was not always obtained, although two readings were made each day. From this cause the gage heights below 0.5 foot are probably too low and in some cases gage heights above 0.5 foot may be artificially high.

Daily gage height, in feet, of Oconee River at Milledgeville—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
1	2.9	3.4	3.9	3.2	2.5	3.55	2.4	4.6	1.8	0.6	0.6	1.3
2	2.85	3.4	3.9	3.5	2.4	3.65	2.35	2.9	1.4	.5	.6	1.4
3	2.8	3.2	3.8	3.2	2.35	2.65	2.1	2.8	1.4	.5	.7	2.2
4	2.8	3.2	3.8	3.1	2.4	2.2	1.8	3.6	1.3	.9	1.1	2.0
5	2.8	3.1	3.8	2.9	2.3	1.8	1.6	2.8	1.3	.6	1.7	2.1
6	2.75	3.1	3.4	3.0	2.1	1.55	1.5	2.4	2.7	.5	1.8	3.2
7	2.75	3.1	4.4	3.1	2.1	1.65	1.4	4.6	2.5	.5	1.5	4.8
8	2.75	5.2	6.4	3.4	2.1	2.25	1.2	a11.6	2.2	.5	1.5	4.1
9	2.75	5.2	7.4	3.7	2.1	2.75	1.2	7.2	1.8	.4	1.4	2.9
10	2.95	5.4	6.1	4.4	2.3	2.2	1.7	9.2	1.6	.8	1.3	2.4
11	2.95	9.5	4.7	3.6	3.5	1.7	2.2	11.6	1.3	.4	1.1	2.2
12	2.9	9.0	4.2	3.4	2.3	1.6	4.2	7.1	1.3	.5	1.3	2.1
13	3.0	6.7	3.9	3.0	2.2	2.1	2.1	5.2	1.3	.5	1.5	2.2
14	3.1	5.1	3.7	2.9	2.1	1.7	1.8	3.4	1.1	.5	1.8	2.0
15	3.1	4.6	3.9	2.75	2.1	1.5	1.4	2.8	1.2	.3	2.0	2.0
16	3.0	4.4	4.7	2.7	2.1	1.45	1.3	7.3	1.0	.2	1.8	2.4
17	3.0	4.0	4.0	2.7	2.1	1.45	1.1	5.5	1.2	.7	1.6	2.2
18	4.2	3.8	3.5	2.7	2.0	1.2	1.2	4.1	.9	.2	1.4	2.5
19	3.5	3.6	3.5	2.75	1.95	1.2	1.0	3.3	1.0	.2	1.3	2.3
20	3.4	3.6	3.4	2.7	1.8	1.1	1.2	2.7	.9	.3	1.2	2.0
21	3.1	3.7	3.3	2.7	1.75	1.0	.9	2.1	1.0	.3	1.1	2.0
22	3.2	6.9	3.3	2.65	1.75	1.4	1.0	1.9	1.0	.4	1.3	1.9
23	11.5	9.4	3.9	2.7	1.7	2.65	.6	1.8	.7	.4	1.4	1.8
24	8.95	8.1	6.1	2.75	1.65	2.0	1.5	1.6	.8	.4	1.5	1.7
25	5.7	6.3	6.2	2.6	1.6	1.65	1.8	2.1	.6	.3	1.7	1.7
26	4.5	5.1	4.6	2.5	1.45	1.4	2.4	1.9	.6	.3	1.9	1.8
27	3.8	4.4	4.1	2.75	1.25	1.4	1.8	2.1	.6	.3	1.6	1.8
28	3.6	4.1	4.3	2.85	1.45	1.1	1.4	2.6	.5	.6	1.3	5.4
29	3.6	4.1	3.8	2.75	1.45	2.0	1.4	2.1	.5	.8	1.2	4.8
30	3.6	.....	3.4	2.6	1.6	1.8	1.4	2.0	.4	.7	1.4	3.9
31	3.4	.....	3.3	.....	2.55	.....	2.4	1.8	.....	.7	.....	3.0
1905b												
1	2.5	2.1	3.6	2.6	3.0	2.6	2.6	1.3	1.3	.3	.93	1.2
2	2.4	2.1	3.5	2.4	2.8	2.3	3.3	1.4	5.4	.7	1.0	1.1
3	2.3	2.1	3.3	2.4	4.0	2.2	6.4	1.2	4.4	.6	.92	2.3
4	2.5	2.1	3.1	2.4	4.0	2.1	5.4	1.0	3.4	1.6	.8	8.7
5	2.2	2.0	3.1	2.5	4.6	2.3	2.9	1.0	2.9	2.5	.77	11.4
6	2.0	2.3	3.0	2.9	4.7	2.0	2.3	.8	1.9	1.5	.75	11.6
7	2.4	3.0	2.9	3.1	3.7	2.0	3.0	.7	1.5	1.3	.7	5.4
8	2.6	4.9	2.9	2.9	5.2	1.8	8.0	1.1	1.2	1.15	.8	3.4
9	2.8	11.0	2.9	2.8	4.3	1.6	8.9	.9	1.0	.8	1.0	3.8
10	2.6	9.7	3.3	4.5	3.6	1.5	4.2	4.4	1.0	.87	1.2	9.6
11	2.4	8.5	3.3	4.3	3.1	1.4	3.6	5.0	1.0	.73	2.3	10.8
12	2.6	10.3	4.5	3.7	2.8	1.4	4.5	4.0	.9	1.0	3.7	10.2
13	3.3	21.0	6.2	5.9	2.5	1.5	4.8	6.8	.8	1.1	2.5	6.1
14	6.3	19.2	4.5	3.9	2.2	1.6	3.6	6.5	1.2	1.3	1.9	4.1
15	7.0	14.7	4.3	3.1	2.0	1.6	3.8	4.9	.9	1.1	1.7	6.1
16	5.0	10.9	3.7	3.2	2.0	1.5	2.7	4.9	1.0	.98	1.5	6.2
17	3.8	6.5	3.4	3.1	3.2	1.5	2.2	4.0	.8	1.1	1.3	5.0
18	3.0	5.3	3.1	2.8	2.7	2.5	1.9	13.0	.8	.82	1.2	4.2
19	2.8	4.6	3.1	2.7	2.4	2.1	1.8	5.7	.7	.93	1.0	3.5
20	2.9	4.3	3.9	2.6	2.1	1.9	1.7	2.7	.7	.9	1.0	4.4
21	2.9	7.8	4.2	2.4	1.9	1.7	2.1	2.1	.8	.85	1.1	18.8
22	2.7	10.2	4.7	2.4	2.2	2.5	1.8	1.8	.6	.7	1.2	18.1
23	2.5	9.6	3.6	2.5	3.3	4.7	1.7	1.8	.5	.63	1.1	15.1
24	2.4	8.6	3.2	2.4	6.6	4.3	1.5	2.1	.4	.68	1.1	10.5
25	2.4	6.3	3.1	2.3	7.2	3.2	2.1	3.4	.5	.63	1.3	6.5
26	2.2	4.9	3.0	2.4	6.2	2.8	2.1	2.8	.5	.87	1.1	5.0
27	2.0	4.3	3.0	2.5	4.9	2.1	1.9	3.6	.4	.87	1.1	4.3
28	2.0	3.9	2.9	2.5	3.5	2.0	1.7	2.0	.1	1.03	1.2	3.9
29	1.9	.....	2.7	2.3	3.1	2.2	1.5	1.6	.2	.96	1.6	6.6
30	2.0	.....	2.6	3.1	3.0	2.7	1.2	1.4	.4	.92	1.3	6.1
31	1.8	.....	2.6	.....	3.5	.....	1.5	1.2	.....	.88	.....	4.8

a This height is doubtful.

b From October 6 to November 6, 1905, an attempt was made to obtain a proper mean gage height by making six readings daily. For the rest of the time only one reading was made.

Rating table for Oconee River at Milledgeville from August 25, 1903, to December 31, 1904.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.20	290	1.30	785	2.80	1,760	8.00	7,040
.30	330	1.40	840	3.00	1,920	9.00	8,090
.40	370	1.50	895	3.20	2,090	10.00	9,140
.50	410	1.60	950	3.40	2,265	11.00	10,190
.60	450	1.70	1,010	3.60	2,450	12.00	11,240
.70	495	1.80	1,070	3.80	2,640	13.00	12,290
.80	540	1.90	1,130	4.00	2,840	14.00	13,340
.90	585	2.00	1,190	5.00	3,890	15.00	14,390
1.00	630	2.20	1,320	6.00	4,940	16.00	15,440
1.10	680	2.40	1,460	7.00	5,990	17.00	16,490
1.20	730	2.60	1,610				

[a] Above 4-foot gage height, daily discharge estimates are based on a tangent, the difference being 105 per tenth.

Estimated monthly discharge of Oconee River at Milledgeville.[a]

Month	Discharge in second-feet		
	Maximum	Minimum	Mean
1903			
August 25–31	2,090	1,573	1,823
September	16,800	1,255	2,998
October	4,625	1,320	1,702
November	2,740	1,573	1,872
December	2,740	1,648	1,911
1904			
January	10,720	1,723	2,643
February	8,615	2,005	3,903
March	6,410	2,175	3,152
April	3,260	1,585	1,928
May	2,355	758	1,229
June	2,496	630	1,138
July	3,050	450	1,019
August	10,820	950	3,138
September	1,685	370	755
October	585	[b]290	403
November	1,190	450	840
December	4,310	785	1,638
The year	10,820	290	1,815

[a] These estimates are only approximately correct. No estimates were attempted for 1905.
[b] See note under gage heights.

OCONEE RIVER AT DUBLIN.

A station was established by the United States Weather Bureau in 1894 at Dublin, Ga., about 60 miles above the junction of the Oconee with the Ocmulgee. Records were kept, with the exception of the summer months of 1896, until April 30, 1897, when the station was discontinued. In 1898 discharge measurements were commenced by the United States Geological Survey, and February 11 an observer was employed to read the gage. October 15, 1898, the

Weather Bureau again adopted the station and has maintained the gage and furnished gage heights to the Geological Survey continuously since that time.

The ordinary width of the river is about 235 feet. At a gage height of about 20 feet the left bank begins to overflow, and is practically covered to the end of the approach at 25 feet. This ground is thickly covered with a brushy growth, which will no doubt cause the velocity of the water overflowing it to be small. The right bank does not overflow. The bed of the stream is of loose rock, sand, and gravel. The channel is straight and the current is swift and fairly uniform, except where it is broken by the three bridge piers.

Discharge measurements are made from the iron highway bridge, which consists of a draw span between two other spans of 75 feet each. The total length of the bridge proper is 320 feet. On the left bank, which is low, there are 1,100 feet of iron-frame trestle approach. There is also a short trestle on the right bank, which is high. The initial point for soundings is the end of the bridge at the right bank, on the upstream side.

The gage is a heavy timber bolted to the downstream side of the center pier of the Wrightsville and Tennille Railroad bridge, 500 feet downstream from the highway bridge.

The bridge is a drawbridge, and the pier to which the gage is attached is the circular center pier of the draw span. A secondary sloping gage, reading from —1.6 to +1.9 feet, is attached to a solid rock on the right bank about 25 feet above the railroad bridge. The gage is read once each day by R. F. Mathis. Bench marks were established as follows: (1) The top of the upstream end of the floor beam on top of the first tubular pier of the wagon bridge from the right bank; elevation, 41.30 feet. (2) A point on the fifth step from the bottom at the south entrance of the court-house, 6 inches from the east end of the step; elevation, 82.51 feet.

Discharge measurements of Oconee River at Dublin.

Date	Gage height	Discharge	Date	Gage height	Discharge
1897	*Feet.*	*Sec.-ft.*	1903	*Feet.*	*Sec.-ft.*
May 5	6.10	6,400	April 3	15.40	20,160
June 7	1.90	2,861	April 4	14.95	19,800
June 8	1.77	2,680	June 6	8.81	9,804
June 9	1.50	2,488	June 6	8.51	9,432
June 10	1.43	2,488	June 15	4.47	5,017
November 7	.40	1,644	July 15	5.95	6,579
			August 24	4.61	4,475
1898			October 6	.12	1,713
February 11	.95	2,057	November 14	1.15	2,472
March 29	.65	1,927			
May 20	— .23	1,272	1904		
June 24	— .28	1,164	February 18	4.33	5,136
July 27	6.23	7,007	April 12	2.45	3,521
August 30	10.80	12,160	July 21	— .98	808
October 20	3.70	4,153	September 16	— .90	840
			September 17	— .95	798
1899			October 27	— 1.55	515
February 2	8.20	9,689	October 27	— 1.55	557
April 28	8.00	9,033	December 3	.45	1,968
June 8	.80	1,937			
September 15	.80	1,997	1905		
September 15	.50	1,903	March 15	7.03	8,283
December 14	3.90	4,028	April 25	1.14	2,631
			April 25	1.11	2,518
1900			June 13	— .60	1,127
April 12	4.25	4,680	June 13	— .60	1,192
December 7	7.30	7,991	July 31	— .62	1,201
			November 6	— .97	929
1901			November 6	— .98	882
February 20	5.00	5,341	November 9	— .99	856
May 7	3.40	3,949			
November 7	1.00	2,334	1906		
			March 6	3.14	4,320
1902			March 6	3.11	4,300
November 12	.27	1,651	May 28	.82	2,280
November 12	0.25	1,615	September 1	5.50	6,560
November 13	.27	1,619			

Daily gage height, in feet, of Oconee River at Dublin.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1898												
1	.....	.....	0.5	1.0	4.0	—0.6	—1.0	5.8	11.8	0.8	3.6	5.5
2	.....	.....	.5	2.0	2.6	— .7	—1.1	4.3	13.0	.7	3.3	5.5
3	.....	.....	.5	2.8	1.9	— .7	—1.2	2.8	16.0	2.3	3.1	5.4
4	.....	.....	.9	2.0	1.7	— .8	—1.2	2.0	23.0	6.9	2.6	7.5
5	.....	.....	1.9	2.5	1.4	— .9	—1.3	1.6	24.6	8.7	2.3	8.5
6	.....	.....	3.9	6.0	1.1	—1.0	—1.2	2.0	23.3	9.4	2.1	9.6
7	.....	.....	3.0	7.8	1.0	— .1	— .9	4.2	21.2	10.5	2.0	11.1
8	.....	.....	2.6	8.5	.9	— .1	+ .3	5.9	19.5	11.3	2.0	12.6
9	.....	.....	2.0	9.4	.8	—1.1	1.0	6.4	18.0	13.5	1.8	12.6
10	.....	.....	1.8	10.0	.7	—1.1	1.8	6.5	17.0	15.5	1.7	10.7
11	.....	0.9	1.5	9.8	.6	—1.2	1.8	4.2	16.0	16.0	1.7	7.7
12	.....	.9	1.4	6.5	.6	—1.2	2.8	3.4	14.8	14.5	1.6	6.7
13	.....	.9	1.0	5.9	.3	—1.2	3.0	3.0	12.5	11.8	1.6	6.0
14	.....	.9	.9	3.3	.2	—1.2	1.6	4.8	7.6	5.0	3.9	5.6
15	.....	.9	.9	2.9	.1	— .7	2.9	5.5	4.7	3.9	6.7	5.2
16	.....	.8	2.0	2.5	.0	— .6	4.6	6.5	3.6	3.5	7.2	4.6
17	.....	.8	3.5	2.0	.0	— .4	4.0	6.4	3.0	3.2	7.6	4.2
18	.....	.9	3.5	1.8	— .2	.0	3.2	4.6	3.0	3.0	8.9	4.6
19	.....	1.0	2.8	1.7	— .2	+ .9	1.8	5.9	2.7	3.0	11.0	3.0
20	.....	1.5	3.1	1.5	— .3	.8	.9	6.0	2.3	2.8	13.0	4.0
21	.....	1.5	2.4	1.4	— .3	.6	.5	5.9	2.2	4.3	14.3	4.4
22	.....	1.4	1.9	1.4	— .4	.8	.0	5.0	2.0	5.6	15.0	5.0
23	.....	1.1	1.5	1.3	— .4	.7	— .2	3.6	2.0	6.9	14.1	6.1
24	.....	.9	1.1	1.8	— .4	— .3	+ .1	2.5	1.8	7.5	12.8	6.5
25	.....	.8	1.0	3.9	— .1	— .5	2.6	1.9	2.0	7.8	10.2	6.9
26	.....	.7	1.0	5.5	+ .2	— .7	5.1	1.6	2.8	6.3	8.3	6.7
27	.....	.5	.9	6.0	.8	— .8	6.1	1.9	2.4	4.3	6.2	6.4
28	.....	.5	.8	4.7	.6	— .9	7.0	7.0	1.5	3.5	5.2	5.6
29	.....	.....	.7	4.9	— .1	— .9	6.7	10.5	1.2	3.1	5.0	5.2
30	.....	.....	.6	5.4	— .3	— .9	6.0	10.9	.9	3.0	5.2	4.9
31	.....	.....	.6	.....	— .5	.....	5.6	11.1	.....	3.3	.....	4.0
1899												
1	3.8	7.7	11.3	8.3	5.4	1.7	.5	2.9	2.5	—1.3	— .4	2.4
2	3.6	8.1	13.8	8.0	4.7	1.8	.6	2.3	2.9	—1.3	— .4	1.1
3	5.2	9.1	16.5	8.5	3.8	1.7	.4	2.0	2.7	—1.3	— .4	2.0
4	5.8	9.9	17.0	9.0	3.7	1.5	.2	1.7	2.1	—1.3	— .5	1.9
5	5.0	10.7	16.9	9.8	3.5	1.4	.1	1.5	1.5	— .8	— .5	1.7
6	4.7	12.7	16.2	9.5	4.1	1.2	.0	.9	1.1	.5	— .5	1.6
7	5.0	13.1	14.5	9.0	5.0	1.0	.2	.8	.8	2.4	— .5	1.3
8	7.8	15.0	12.7	8.6	4.8	.8	.4	.7	.3	5.1	— .6	1.1
9	8.6	20.1	11.0	8.0	4.4	.7	.0	.2	.2	7.2	— .6	.9
10	10.4	22.5	9.8	7.8	3.6	.6	— .1	— .3	.1	8.1	— .7	.7
11	12.2	21.7	8.6	7.5	3.0	.5	— .1	— .4	.0	8.6	— .7	.5
12	14.1	18.9	7.6	7.0	2.7	.4	— .2	— .2	.1	6.8	— .7	1.2
13	14.4	17.5	7.0	6.4	2.7	.3	— .3	— .1	.7	4.1	— .8	2.6
14	15.3	16.8	6.8	5.6	2.4	.6	— .4	— .1	1.5	1.7	— .8	3.3
15	14.8	15.5	6.7	5.2	2.3	.9	— .4	— .2	.8	1.1	— .1	4.1
16	14.5	13.7	7.3	5.0	2.1	1.2	— .4	— .3	.1	.6	.7	3.2
17	14.3	12.4	7.9	4.9	2.0	.7	— .5	— .5	— .3	.5	.1	2.5
18	13.7	12.5	8.3	4.8	1.9	.3	— .6	— .6	— .4	.5	.8	1.9
19	13.3	12.7	9.2	5.3	1.8	.3	— .6	— .7	— .5	.5	.1	1.5
20	13.1	13.3	10.1	5.8	1.7	.6	— .6	— .8	— .6	.4	— .2	1.3
21	12.8	13.6	10.9	5.6	1.6	.9	— .7	— .8	— .7	.4	— .3	1.2
22	12.6	13.0	12.6	5.5	1.5	.5	— .7	— .9	— .8	.2	— .4	1.2
23	11.3	12.0	14.2	5.2	1.5	.3	— .7	— .7	— .9	.0	— .3	1.4
24	8.3	10.8	13.4	5.0	1.8	.2	— .8	— .3	— .9	— .1	.1	1.4
25	7.8	9.8	11.9	4.8	2.1	.2	— .8	— .2	—1.0	— .3	1.5	2.3
26	7.3	9.0	10.0	5.9	1.8	.0	.3	2.5	—1.0	— .4	1.3	5.3
27	7.1	9.7	9.6	7.4	1.7	— .1	.7	3.0	—1.1	— .5	2.1	5.6
28	6.8	9.6	8.9	8.0	1.6	— .2	.9	3.0	—1.1	— .6	3.2	4.6
29	7.0	.....	8.3	7.2	1.6	— .2	1.8	5.1	—1.1	— .7	4.4	3.9
30	7.4	.....	8.1	6.1	1.6	.4	4.7	4.5	—1.2	— .7	3.3	2.8
31	7.6	.....	8.0	.....	1.6	.....	5.0	2.9	.....	— .3	.....	2.6

Daily gage height, in feet, of Oconee River at Dublin—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900												
1	2.4	1.7	8.0	8.8	8.3	1.6	19.0	4.7	.8	— .1	1.0	2.3
2	2.1	1.6	9.6	6.5	6.4	1.4	16.9	5.0	2.7	— .3	.9	1.8
3	1.8	1.6	10.4	5.3	6.9	1.3	14.8	3.7	2.3	— .3	3.7	1.6
4	1.7	1.6	11.0	4.8	7.3	1.2	12.7	2.9	2.1	— .2	4.7	1.8
5	1.6	1.8	11.7	4.5	7.5	1.9	10.1	2.5	1.5	.0	5.5	3.2
6	1.6	3.4	11.0	4.3	6.7	2.8	8.5	1.9	1.2	0.8	6.5	6.4
7	1.5	3.7	9.0	4.2	5.4	4.1	8.0	1.6	.5	1.2	6.6	7.2
8	1.4	3.5	6.6	4.0	4.1	5.0	5.5	1.6	.4	.9	4.8	7.6
9	1.2	3.1	5.8	3.7	3.9	6.0	3.9	1.5	.2	1.1	3.9	6.8
10	1.4	3.5	7.0	3.5	3.3	6.2	3.2	1.3	.2	1.2	2.6	4.5
11	1.9	7.9	8.0	3.3	3.0	6.2	2.6	.7	.0	1.0	1.8	3.3
12	2.4	10.2	8.5	3.9	2.7	5.7	2.8	.4	— .2	.8	1.3	2.7
13	4.3	11.9	8.7	5.0	2.5	4.3	6.6	.2	— .3	.6	1.2	2.3
14	5.4	16.4	8.0	5.9	2.3	3.0	6.1	.1	— .1	.7	1.0	2.3
15	5.7	22.0	7.1	6.3	2.2	2.9	5.5	.3	— .1	.6	1.0	5.2
16	4.9	24.4	6.4	5.0	2.1	5.0	4.7	1.1	.4	.6	.9	6.7
17	3.3	24.9	8.1	4.1	2.0	7.5	4.1	.8	4.8	.6	.8	8.1
18	2.9	24.1	8.7	3.4	1.9	8.3	2.8	.6	5.8	.5	.7	8.4
19	2.8	22.6	9.0	5.1	2.1	9.9	2.3	.5	6.0	.2	.9	6.4
20	3.2	20.0	9.1	8.2	3.7	10.3	2.0	.3	3.5	.1	.7	4.2
21	4.1	17.2	8.5	11.1	5.5	10.6	1.8	.1	1.9	.1	.7	4.6
22	4.7	14.0	7.4	15.6	5.3	10.2	1.5	.5	1.3	.0	1.1	6.8
23	4.4	10.7	7.8	16.9	3.6	7.9	1.2	.5	.7	.0	1.2	7.7
24	3.9	9.1	8.3	17.6	3.1	8.0	1.0	.4	.4	.7	.8	8.0
25	3.3	9.0	8.9	17.3	3.6	9.0	2.4	.8	.3	3.7	.8	8.2
26	2.9	8.7	9.5	17.0	5.8	9.9	3.1	1.3	.3	5.6	.7	6.5
27	2.4	8.1	9.6	17.1	5.0	11.6	2.1	.9	.3	5.5	1.7	4.8
28	2.2	7.4	9.8	16.0	3.4	16.7	1.7	.7	.2	3.0	3.5	3.8
29	2.0	.....	10.2	13.6	3.0	20.0	1.7	.5	.2	2.1	5.3	3.4
30	1.8	.....	10.4	11.4	2.2	20.8	5.9	.5	.0	1.9	3.4	3.3
31	1.7	.....	10.2	.....	1.9	.....	5.2	.8	.....	1.3	.....	8.4
1901												
1	9.8	4.7	4.6	16.4	3.7	4.0	6.1	1.5	10.3	4.0	.8	1.0
2	10.4	6.1	4.2	16.1	3.5	6.3	6.5	1.4	10.5	4.3	.8	1.0
3	11.3	5.6	3.9	16.5	3.3	7.0	6.0	1.2	10.3	4.5	.8	1.0
4	12.5	6.7	3.7	16.6	3.0	7.5	5.8	1.2	9.4	5.1	.8	1.3
5	13.0	8.6	3.4	20.5	2.9	6.0	4.3	.8	6.3	4.8	.8	1.6
6	13.9	9.3	3.2	22.6	2.7	5.0	3.0	.5	3.4	3.9	.9	2.5
7	13.9	11.0	3.0	21.3	2.5	5.3	2.8	1.4	2.3	2.8	1.1	2.2
8	13.0	14.3	2.9	19.5	2.9	7.5	2.0	4.0	2.0	2.1	1.0	1.8
9	10.8	15.6	2.8	17.4	2.8	8.1	1.8	4.4	1.7	2.0	1.0	1.6
10	7.4	15.8	2.8	15.0	2.6	9.5	1.7	4.5	1.3	1.6	1.0	1.5
11	6.0	14.6	4.5	12.0	2.4	8.4	2.1	2.9	1.2	1.7	.9	1.5
12	5.4	13.8	5.5	8.2	2.1	7.5	2.1	1.7	1.0	1.7	.9	2.0
13	6.0	13.4	6.6	6.0	2.0	4.9	2.0	3.4	.8	1.6	.9	2.0
14	6.6	12.5	8.0	7.0	1.8	7.7	1.9	4.3	.7	2.0	.9	1.7
15	7.4	10.2	8.2	8.0	1.8	9.1	1.8	4.0	.6	2.5	.8	2.0
16	8.0	8.9	6.2	8.9	2.0	10.4	1.5	4.5	1.4	2.0	.9	5.5
17	8.6	6.8	5.1	9.6	2.2	11.2	2.4	4.5	1.4	1.7	.9	6.8
18	9.1	5.9	4.6	10.0	1.8	11.4	2.7	6.2	4.0	1.4	.9	7.4
19	9.6	5.4	4.2	9.8	1.7	11.3	2.5	6.5	11.4	1.3	.9	8.3
20	9.9	5.1	3.7	9.0	2.0	10.8	3.3	7.4	14.5	1.3	1.1	8.0
21	10.3	4.7	4.7	8.1	3.6	9.7	5.9	8.0	17.8	1.2	1.4	4.5
22	9.6	4.5	4.8	8.0	6.0	7.6	7.0	7.8	19.4	1.0	1.5	3.0
23	6.6	4.2	4.0	7.6	7.5	5.3	7.6	7.5	18.0	1.0	1.7	2.5
24	5.3	4.5	4.1	6.8	7.8	4.1	7.2	7.5	16.4	1.0	1.6	2.6
25	4.6	4.9	4.3	6.2	8.1	3.7	3.5	7.3	13.8	.9	1.4	3.0
26	4.8	4.9	4.8	5.0	6.6	4.5	2.9	7.2	8.3	.9	1.3	3.6
27	4.7	5.0	7.5	4.6	4.5	4.1	1.5	7.8	4.0	.9	1.3	3.7
28	5.0	5.2	9.3	4.1	4.6	6.3	1.4	8.6	3.1	.8	1.3	3.8
29	5.1	.....	12.0	3.8	3.9	6.0	3.0	9.6	3.8	.8	1.2	6.0
30	5.6	.....	15.1	3.8	3.1	5.5	2.3	10.0	4.1	.7	1.1	7.6
31	5.1	.....	16.5	.....	2.8	.....	1.8	10.3	.....	.8	.....	8.6

Daily gage height, in feet, of Oconee River at Dublin—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1902												
1	10.0	4.0	11.0	15.8	3.4	1.0	.2	2.0	.7	2.8	.8	4.0
2	12.0	6.3	13.4	17.6	3.3	1.0	−.1	1.7	.5	1.7	.5	5.3
3	14.1	8.0	23.0	17.5	4.5	1.2	−.2	.8	.8	2.0	.2	6.1
4	14.9	9.5	25.5	17.1	5.5	1.8	−.2	.3	− .1	2.5	− .1	7.5
5	15.3	14.0	25.8	16.0	4.7	1.6	−.2	2.9	− .4	1.6	− .2	8.0
6	14.6	19.0	24.5	14.1	3.8	0.9	1.4	4.3	−0.6	2.9	−0.2	8.7
7	12.4	20.0	22.0	11.3	3.5	.7	.9	4.4	− .9	2.7	.3	9.0
8	7.0	19.5	19.0	9.0	3.0	.6	.7	3.5	−1.1	2.4	.6	9.8
9	4.4	18.0	16.0	9.0	3.1	2.0	.2	2.0	−1.2	1.8	.8	9.0
10	3.9	15.6	13.0	9.0	2.7	3.9	−.2	.9	−1.2	1.0	.6	5.5
11	3.6	12.3	9.0	9.0	2.7	4.0	−.7	.5	−1.3	.7	.5	3.5
12	3.2	7.3	7.5	8.5	2.7	3.0	1.0	1.0	1.2	.8	.4	3.2
13	3.0	5.0	6.5	7.0	2.5	1.3	2.5	2.4	2.0	.9	.3	3.0
14	2.8	4.3	6.0	6.0	2.3	1.0	4.5	1.3	1.5	1.0	.2	4.8
15	2.6	4.1	7.1	5.6	2.0	1.0	3.5	.7	.7	1.2	.1	4.9
16	2.5	4.1	9.8	5.5	2.2	1.2	4.4	1.0	.4	2.0	.0	3.8
17	2.4	4.8	12.7	5.5	3.0	4.5	5.1	2.3	.8	1.0	− .1	3.0
18	2.4	5.0	14.2	6.0	3.0	4.5	5.5	3.0	.6	.8	− .1	2.6
19	2.4	5.0	19.0	7.9	2.7	2.5	3.3	1.7	.2	.5	− .1	3.5
20	2.4	4.8	21.0	9.0	3.0	3.7	1.2	.8	−.2	.1	1.0	3.0
21	2.5	4.6	19.7	10.0	2.9	2.8	.8	.4	.3	−.2	2.0	2.0
22	3.1	4.5	18.0	10.0	2.8	2.0	.4	.1	.3	−.4	1.4	1.4
23	3.7	6.5	15.9	8.1	2.7	2.0	2.4	.5	.7	−.5	1.0	4.0
24	3.7	6.6	13.7	6.0	2.5	1.5	1.0	.2	.5	−.5	.7	5.5
25	3.4	7.0	11.6	5.0	2.3	1.1	.5	−.2	.2	−.6	.5	5.0
26	3.0	8.0	10.1	4.6	2.0	.7	1.7	−.4	.1	−.6	1.0	2.5
27	2.9	8.6	9.5	4.3	1.7	.5	1.0	−.4	1.0	−.3	4.4	2.0
28	2.8	9.6	9.1	3.9	1.5	.4	1.2	−.3	3.5	1.5	5.5	1.7
29	2.6	.....	8.9	3.6	1.4	.3	2.0	.1	4.0	2.0	4.5	1.5
3	2.6	.....	10.9	3.6	1.3	.2	1.8	.2	4.2	1.8	3.5	1.3
31	3.0	.....	12.1	.....	1.1	.....	1.3	.5	.....	1.5	.....	1.0
1903												
1	1.0	4.3	7.9	15.1	3.4	3.3	4.2	.6	.4	.5	.3	.8
2	.9	3.8	9.0	14.9	3.1	2.8	3.2	.9	.4	.4	.3	.8
3	2.5	3.4	10.0	15.5	3.0	4.5	2.5	1.0	.0	.3	.6	.6
4	3.5	3.4	12.0	15.0	3.2	6.0	2.2	2.1	−.1	.1	.8	.7
5	4.0	4.0	13.5	14.1	4.8	7.5	2.3	4.2	−.2	.0	1.9	.8
6	5.0	5.8	13.4	12.9	6.0	8.4	1.8	4.6	−.1	−.1	3.8	.7
7	4.5	6.6	12.4	10.9	5.5	9.3	2.8	3.3	−.2	.1	3.0	.8
8	4.0	7.8	11.8	8.9	4.3	10.5	4.8	2.0	−.2	.3	3.0	.9
9	3.2	8.8	11.9	7.2	4.1	11.7	5.9	1.5	−.2	.6	2.2	.9
10	2.6	11.0	10.8	8.8	4.5	13.0	6.8	.9	−.2	.6	1.8	1.0
11	2.3	21.0	9.5	9.2	4.4	13.1	5.2	1.0	1.0	.4	1.1	1.4
12	2.8	24.0	8.8	10.0	3.9	11.2	3.5	1.0	−1.0	.2	1.0	2.0
13	3.6	23.4	8.6	10.5	3.5	8.5	3.2	1.2	.0	.1	1.1	1.8
14	4.0	22.7	8.5	10.1	3.3	6.3	4.0	1.0	.1	.1	1.1	1.8
15	4.4	12.5	8.4	9.5	5.3	4.7	5.8	1.2	.5	.0	1.1	1.1
16	3.9	20.0	8.6	9.0	8.5	3.6	6.7	2.6	2.2	.0	1.0	1.3
17	3.2	18.4	8.4	8.5	9.8	3.2	7.3	3.8	6.5	.5	1.1	1.3
18	3.2	16.9	8.3	7.3	10.8	2.7	6.8	5.4	7.6	1.2	1.0	1.3
19	3.2	15.4	7.7	6.0	11.5	2.5	3.7	6.0	9.0	4.3	1.3	1.1
20	2.8	15.6	6.8	5.3	10.4	2.3	2.5	7.0	10.7	3.0	1.6	1.0
21	2.5	16.9	6.0	5.2	5.9	2.2	2.4	8.0	9.9	1.8	1.6	1.0
22	2.4	16.8	5.9	5.4	4.2	2.4	1.7	8.8	9.0	1.6	1.6	1.2
23	2.4	15.8	7.5	5.3	3.6	2.1	1.3	9.1	2.0	.9	1.0	1.5
24	2.3	14.3	8.8	4.5	3.0	2.6	1.2	5.0	1.5	.6	1.0	1.7
25	2.4	12.0	9.8	4.1	2.7	2.4	1.0	2.5	1.3	.5	.9	1.6
26	2.7	8.2	11.3	3.8	2.4	2.0	.9	1.8	1.0	.4	.9	2.5
27	3.3	6.3	13.4	3.9	2.3	2.1	.7	1.5	.9	.3	.9	3.7
28	5.7	6.3	15.1	4.7	2.3	3.5	.6	1.0	.8	.2	.9	3.5
29	6.0	.....	17.0	4.8	2.8	3.9	.5	.9	.7	.2	.8	3.2
30	5.4	.....	17.6	3.6	5.3	4.7	.5	.6	.5	.2	.8	2.6
31	5.0	.....	16.7	.....	3.8	.....	.6	.5	.....	.3	.....	2.0

Daily gage height, in feet, of Oconee River at Dublin—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
1	1.7	2.5	3.9	2.5	1.0	.0	−.1	−.5	.6	−1.3	−1.1	−.5
2	1.7	2.8	3.5	2.0	1.0	.8	.2	.8	.1	−1.4	−1.2	−.5
3	1.7	2.7	3.5	2.0	1.0	2.0	.6	1.4	−.3	−1.3	−1.1	.3
4	1.6	2.7	3.9	2.0	.7	1.3	.2	.9	−.4	−1.3	−1.0	1.2
5	1.6	2.7	4.0	1.8	.7	.5	−.4	1.5	−.5	−1.3	−.8	1.2
6	1.6	2.0	3.9	1.6	.7	.3	−.6	2.4	−.5	−1.3	−.5	1.3
7	1.5	2.0	3.9	1.6	.4	.1	−.7	1.6	.4	−1.3	−.3	1.7
8	1.4	3.0	4.5	2.0	.4	.1	−.7	2.4	1.1	−1.4	−.3	2.9
9	1.4	5.0	5.5	2.0	.3	.0	−.8	5.0	.6	−1.3	−.4	3.0
10	1.6	7.0	5.5	2.7	.3	−.1	−.8	6.2	.2	−1.3	−.7	2.0
11	1.4	8.5	6.8	3.0	.3	−0.3	−.9	6.5	−.1	−1.4	−.7	1.0
12	1.4	9.0	5.5	3.0	.3	−.5	−.7	6.8	−.4	−1.3	−.5	.8
13	2.0	9.9	4.0	2.0	1.0	−.1	.2	6.9	−.7	−1.4	−.5	.8
14	2.0	9.9	3.5	2.0	1.0	−.1	.3	6.6	−.7	−1.4	−.3	.6
15	2.0	9.9	3.4	1.4	1.0	−.1	−.4	3.5	−.7	−1.4	−.1	.5
16	2.0	7.5	3.4	1.0	.7	−.3	−.6	1.8	−.8	−1.4	−.2	.5
17	2.0	5.5	3.4	1.0	.7	−.5	−.8	3.8	−.9	−1.4	−.1	.8
18	2.0	4.5	3.4	1.0	.7	−.5	−.9	3.3	−.9	−1.5	−.1	.8
19	3.0	4.0	3.0	1.0	.7	−.5	−1.0	3.0	−.9	−1.4	−.2	.9
20	2.8	3.5	2.9	1.0	.7	−.6	−1.0	2.0	−1.0	−1.5	−.4	.9
21	2.6	4.0	2.5	1.0	.7	−.5	−1.0	.9	−1.0	−1.5	−.4	.8
22	2.0	5.5	2.0	1.0	.4	−.5	−1.0	.4	−1.0	−1.5	−.5	.6
23	2.9	7.0	2.0	1.0	.4	−.5	−.8	.1	−1.0	−1.5	−.5	.4
24	6.6	7.8	2.9	1.0	.4	−.1	−.8	−.1	−1.1	−1.5	−.4	.3
25	7.6	8.0	3.8	1.0	.0	−.1	−.6	.1	−1.1	−1.5	−.3	.2
26	7.8	8.3	5.0	1.0	.0	−.4	−.3	.3	−1.1	−1.5	−.1	.2
27	6.9	7.0	4.5	1.0	.0	−.3	−.2	.9	−1.2	−1.4	−.1	.3
28	4.4	5.0	4.0	1.0	−.2	−.9	−.1	2.5	−1.2	−1.4	−.1	.6
29	3.6	4.0	3.8	1.0	−.2	−.8	−.4	3.0	−1.2	−1.4	−.2	2.5
30	3.2	.....	3.4	1.0	−.5	−.5	−.6	1.0	−1.2	−1.3	−.4	2.5
31	2.9	.....	3.0	.....	.0	.....	−.6	1.0	.....	−1.1	.....	2.5
1905												
1	2.1	.7	5.4	1.8	1.4	2.2	.8	−.7	−.5	−1.2	−.7	−.3
2	1.7	.7	4.4	1.7	1.7	1.6	1.3	−.6	−.3	−1.2	−.6	−.4
3	1.1	.7	3.9	1.7	1.9	1.2	.9	−.8	1.2	−1.3	−.6	−.2
4	1.0	.6	3.6	1.6	2.5	.9	3.3	−.8	2.8	−1.2	−.8	.5
5	.4	.6	3.3	1.5	3.9	.6	4.3	−.9	1.8	−1.1	−.9	4.0
6	.4	.7	3.0	1.6	4.0	.6	2.2	−1.0	1.6	.4	−.9	5.8
7	1.2	1.1	2.8	1.8	4.2	.6	.9	−1.1	.8	−.1	−.9	6.4
8	1.5	1.8	2.7	2.3	3.3	.1	1.1	−1.0	.1	−.4	−.9	6.6
9	1.5	3.8	2.5	2.1	3.3	−.1	4.4	−1.0	−.3	−.6	−.9	5.4
10	1.6	5.9	2.8	2.1	3.3	−.3	5.5	−.8	−.5	−.6	−.8	3.4
11	1.5	7.7	3.3	3.1	2.4	−.4	5.0	.1	−.7	−.8	−.4	5.5
12	1.5	8.8	4.3	3.9	1.8	−.5	3.0	3.0	−.8	−.9	.0	6.4
13	1.1	12.5	5.8	3.7	1.3	−.5	3.0	3.0	−.7	−.9	1.4	6.8
14	1.7	14.5	7.3	5.0	.9	−.5	3.8	4.2	−.6	−.7	1.2	7.1
15	4.2	16.8	7.3	5.3	.6	−.5	2.7	5.0	−.7	−.7	.2	7.0
16	5.0	19.5	6.6	4.0	.3	−.1	2.3	4.0	−.6	−.6	.1	6.7
17	4.5	19.5	5.4	3.3	.6	−.3	1.4	3.8	−.7	−.7	−.1	6.0
18	3.3	18.0	4.4	2.9	1.2	−.3	.6	2.8	−.8	−.8	−.2	5.5
19	2.6	16.0	3.5	2.2	1.2	−.3	.2	4.9	−.9	−.9	−.4	4.2
20	1.6	13.8	3.0	2.0	.8	+.3	−.4	5.8	−.9	−.9	−.5	3.0
21	1.6	10.5	3.8	1.6	.4	−.1	−.2	3.0	−1.0	−.9	−.5	6.3
22	1.6	8.5	4.8	1.6	.2	−.2	−.3	1.0	−1.1	−.	−.6	8.7
23	1.6	8.8	5.2	1.6	.4	+.2	−.2	.5	−1.1	−1.0	−.7	9.5
24	1.4	9.4	4.3	1.4	1.9	1.4	−.3	−.1	−1.0	−1.1	−.5	11.0
25	1.2	9.8	3.8	1.2	4.0	2.0	−.4	.1	−1.2	−1.1	−.2	13.5
26	1.2	10.3	3.3	1.1	5.5	1.7	−.5	1.2	−1.2	−1.0	−.4	14.6
27	.9	9.8	2.9	1.3	5.8	1.0	+.3	1.3	−1.2	−1.0	−.4	14.0
28	.7	7.5	2.6	1.3	4.3	.4	−.1	1.5	−1.2	−.8	−.5	12.0
29	.6	.....	2.3	1.2	2.8	.3	−.3	.8	−1.2	−.7	−.4	8.0
30	.6	.....	2.2	1.0	1.9	.3	−.5	.1	−1.2	−.7	−.4	7.0
31	.7	.....	1.9	.....	1.7	.....	−.5	−.3	.....	−.7	.....	7.2

Daily gage height, in feet, of Oconee River at Dublin—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
1	6.9	13.9	3.1	9.7	1.4	1.6	1.3	6.7	5.6	3.9	0.5	1.0
2	6.2	11.8	2.7	10.0	2.4	1.5	.9	7.8	7.5	2.7	.5	.9
3	5.6	8.9	2.7	9.2	2.4	1.5	.9	8.3	5.0	5.6	.2	.7
4	5.6	7.6	2.5	7.7	2.2	1.4	1.9	8.9	4.0	6.8	.2	.8
5	7.5	6.4	3.0	6.5	1.8	1.4	2.5	8.5	3.0	8.2	.7	.8
6	8.5	4.4	3.3	5.0	1.5	1.6	2.9	6.9	2.5	9.1	.7	.7
7	10.0	4.7	3.3	3.5	1.2	1.8	2.6	6.9	2.0	9.1	.6	.7
8	12.6	4.4	3.0	3.0	1.0	2.1	1.9	5.9	1.5	9.8	.5	1.0
9	14.4	5.7	4.0	3.0	1.5	1.8	3.9	4.5	1.5	10.0	.5	1.0
10	14.4	7.2	5.6	2.7	2.3	1.0	4.2	3.4	1.0	10.3	.7	1.0
11	13.3	6.2	6.9	2.5	3.0	.8	4.9	2.5	.9	9.0	.6	1.0
12	10.0	6.9	7.3	4.3	2.2	.6	6.2	1.7	.7	8.0	.6	1.0
13	6.4	6.5	6.5	5.0	1.5	.3	7.1	1.4	.7	4.0	.7	1.7
14	6.0	6.3	4.9	4.2	1.5	.3	6.0	1.5	1.0	2.0	.6	2.7
15	6.1	6.5	4.0	3.3	1.2	5.6	4.5	1.7	1.5	1.5	.7	3.6
16	5.7	5.5	3.5	2.9	.9	7.7	5.8	1.9	2.0	1.0	1.5	2.6
17	4.8	4.9	6.7	3.0	.8	11.1	6.5	2.0	2.5	.3	1.5	1.3
18	4.3	3.9	7.7	3.8	.8	14.7	7.2	2.4	2.0	1.0	1.8	1.5
19	4.4	3.3	9.5	3.2	.7	18.7	7.7	3.4	1.8	1.0	1.7	2.8
20	3.8	3.8	12.5	3.0	.7	18.2	8.0	4.5	1.2	1.5	2.0	2.0
21	3.7	3.5	15.0	2.4	.8	17.0	9.0	5.6	1.9	1.8	2.6	4.5
22	3.4	3.4	15.7	2.0	.9	14.6	9.9	4.8	4.5	2.0	2.8	5.3
23	4.2	4.6	15.7	2.2	1.0	13.0	10.2	5.5	5.0	2.5	2.0	4.5
24	4.5	4.4	16.4	1.8	1.0	6.8	9.0	6.0	6.0	1.5	1.7	3.5
25	9.2	4.0	17.5	1.7	1.2	3.9	8.0	5.0	4.8	1.0	1.5	3.0
26	14.7	3.2	16.7	1.6	1.4	2.0	7.4	4.2	3.8	1.0	1.7	3.0
27	19.1	3.0	14.0	1.4	1.3	1.6	8.0	3.0	3.7	.9	1.0	3.0
28	19.2	3.0	13.1	1.0	1.3	1.5	8.0	3.3	3.4	.7	1.0	1.7
29	18.8	.....	9.0	.9	1.6	2.0	6.0	5.5	3.0	1.0	1.0	1.6
30	17.0	.....	7.8	1.0	1.7	1.6	4.0	6.5	4.8	1.0	1.0	1.5
31	15.2	.....	8.5	.....	1.6	.....	5.0	6.0	.....	.7	.....	2.0

Rating tables for Oconee River at Dublin.

FEBRUARY 11, 1898, TO DECEMBER 31, 1900.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
— 1.30	865	0.90	2,012	3.00	3,560	7.50	8,410
— 1.20	890	1.00	2,080	3.20	3,720	8.00	8,980
— 1.10	920	1.10	2,149	3.40	3,880	8.50	9,550
— 1.00	950	1.20	2,218	3.60	4,070	9.00	10,120
— .90	982	1.30	2,288	3.80	4,260	9.50	10,690
— .80	1,015	1.40	2,358	4.00	4,460	10.00	11,280
— .70	1,055	1.50	2,429	4.20	4,672	11.00	12,400
— .60	1,095	1.60	2,500	4.40	4,888	12.00	13,540
— .50	1,140	1.70	2,572	4.60	5,108	13.00	14,680
— .40	1,185	1.80	2,644	4.80	5,332	14.00	15,820
— .30	1,242	1.90	2,717	5.00	5,560	15.00	16,960
— .20	1,300	2.00	2,790	5.20	5,788	16.00	18,100
— .10	1,362	2.10	2,864	5.40	6,016	17.00	19,240
.00	1,425	2.20	2,938	5.60	6,244	18.00	20,380
.10	1,488	2.30	3,013	5.80	6,472	19.00	21,520
.20	1,552	2.40	3,089	6.00	6,700	20.00	22,660
.30	1,616	2.50	3,166	6.20	6,928	21.00	23,800
.40	1,681	2.60	3,243	6.40	7,156	22.00	24,940
.50	1,746	2.70	3,321	6.60	7,384	23.00	26,080
.60	1,812	2.80	3,400	6.80	7,612	24.00	27,220
.70	1,878	2.90	3,480	7.00	7,840	25.00	28,360
.80	1,945						

Estimates based on this table above gage height 12 feet are from 5 to 25 per cent. too low, the percentage of error increasing gradually with the increase of stage above 12 feet.

JANUARY 1 TO DECEMBER 31, 1901.[b]

0.50	2,080	1.60	2,680	2.70	3,417	3.80	4,287
.60	2,125	1.70	2,742	2.80	3,490	3.90	4,378
.70	2,173	1.80	2,805	2.90	3,564	4.00	4,472
.80	2,223	1.90	2,869	3.00	3,639	4.10	4,569
.90	2,275	2.00	2,934	3.10	3,715	4.20	4,670
1.00	2,329	2.10	3,000	3.20	3,792	4.30	4,775
1.10	2,385	2.20	3,067	3.30	3,870	4.40	4,883
1.20	2,442	2.30	3,135	3.40	3,949	4.50	4,993
1.30	2,500	2.40	3,204	3.50	4,030	4.60	5,105
1.40	2,559	2.50	3,274	3.60	4,113	4.70	5,218
1.50	2,619	2.60	3,345	3.70	4,199	4.80	5,332

JANUARY 1 TO DECEMBER 31, 1902.[c]

— 1.30	900	0.00	1,475	1.20	2,210	2.80	3,410
— 1.20	935	.10	1,530	1.30	2,280	3.00	3,570
— 1.10	970	.20	1,585	1.40	2,350	3.20	3,740
— 1.00	1,010	.30	1,640	1.50	2,420	3.40	3,910
— .90	1,050	.40	1,700	1.60	2,490	3.60	4,090
— .80	1,090	.50	1,760	1.70	2,565	3.80	4,280
— .70	1,135	.60	1,820	1.80	2,640	4.00	4,480
— .60	1,180	.70	1,880	1.90	2,715	4.20	4,690
— .50	1,225	.80	1,945	2.00	2,790	4.40	4,900
— .40	1,270	.90	2,010	2.20	2,940	4.60	5,120
— .30	1,320	1.00	2,075	2.40	3,090	4.80	5,340
— .20	1,370	1.10	2,140	2.60	3,250	5.00	5,560
— .10	1,420						

a Above gage height 5.0 feet the rating curve is a tangent, the difference being 114 per tenth.
b Above gage height 4.8 feet this table is the same as the 1900 table.
c Above gage height 5.0 feet this table is the same as the 1900 table.

Rating tables for Oconee River at Dublin—Continued.

JANUARY 1 TO DECEMBER 31, 1903.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
—0.20	1,500	1.20	2,410	5.00	5,470	12.00	14,620
— .10	1,530	1.40	2,550	5.50	6,020	13.00	16,270
.00	1,630	1.60	2,690	6.00	6,620	14.00	17,920
.10	1,685	1.80	2,830	6.50	7,220	15.00	19,620
.20	1,740	2.00	2,970	7.00	7,820	16.00	21,320
.30	1,800	2.20	3,120	7.50	8,420	17.00	23,020
.40	1,865	2.40	3,270	8.00	9,020	18.00	24,720
.50	1,930	2.60	3,420	8.50	9,645	19.00	26,420
.60	1,995	2.80	3,570	9.00	10,270	20.00	28,120
.70	2,060	3.00	3,720	9.50	10,945	21.00	29,820
.80	2,130	3.50	4,120	10.00	11,620	22.00	31,520
.90	2,200	4.00	4,520	10.50	12,345	23.00	33,220
1.00	2,270	4.50	4,970	11.00	13,070	24.00	34,920

JANUARY 1 TO DECEMBER 31, 1904.

—1.50	560	—0.30	1,305	1.60	2,800	5.00	5,790
—1.40	600	— .20	1,381	1.80	2,964	5.50	6,300
—1.30	640	— .10	1,457	2.00	3,130	6.00	6,830
—1.20	695	.00	1,634	2.20	3,296	6.50	7,380
—1.10	750	.20	1,688	2.40	3,462	7.00	7,930
—1.00	810	.40	1,842	2.60	3,630	7.50	8,505
— .90	874	.60	1,993	2.80	3,799	8.00	9,090
— .80	941	.80	2,154	3.00	3,969	8.50	9,660
— .70	1,010	1.00	2,312	3.50	4,402	9.00	10,330
— .60	1,081	1.20	2,473	4.00	4,850	9.50	10,980
— .50	1,154	1.40	2,636	4.50	5,310	10.00	10,630
— .40	1,229						

JANUARY 1 TO DECEMBER 31, 1905.[b]

—1.30	690	.90	2,360	3.00	4,150	6.20	7,310
—1.20	750	1.00	2,440	3.10	4,240	6.40	7,530
—1.10	810	1.10	2,520	3.20	4,330	6.60	7,750
—1.00	875	1.20	2,605	3.30	4,420	6.80	7,970
— .90	945	1.30	2,690	3.40	4,510	7.00	8,190
— .80	1,015	1.40	2,775	3.50	4,600	7.50	8,790
— .70	1,090	1.50	2,860	3.60	4,695	8.00	9,390
— .60	1,165	1.60	2,945	3.70	4,790	8.50	9,990
— .50	1,240	1.70	3,030	3.80	4,885	9.00	10,640
— .40	1,320	1.80	3,115	3.90	4,980	9.50	11,290
— .30	1,400	1.90	3,200	4.00	5,075	10.00	11,990
— .20	1,480	2.00	3,285	4.20	5,265	11.00	13,430
.10	1,560	2.10	3,370	4.40	5,455	12.00	14,930
.00	1,640	2.20	3,455	4.60	5,650	13.00	16,500
.10	1,720	2.30	3,540	4.80	5,850	14.00	18,100
.20	1,800	2.40	3,625	5.00	6,050	15.00	19,800
.30	1,880	2.50	3,710	5.20	6,250	16.00	21,500
.40	1,960	2.60	3,795	5.40	6,450	17.00	23,200
.50	2,040	2.70	3,880	5.60	6,650	18.00	24,900
.60	2,120	2.80	3,970	5.80	6,870	19.00	26,600
.70	2,200	2.90	4,060	6.00	7,090	20.00	28,300
.80	2,280						

a The table becomes tangent above 14 feet, with a difference of 170 per tenth.

b Above gage height 14 feet the rating curve is a tangent, the difference being 170 per tenth.

Rating tables for Oconee River at Dublin—Continued.

JANUARY 1 TO DECEMBER, 1906.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.20	1,800	1.60	2,945	3.00	4,150	5.80	6,870
.30	1,880	1.70	3,030	3.20	4,330	6.00	7,090
.40	1,960	1.80	3,115	3.40	4,510	7.00	8,190
.50	2,040	1.90	3,200	3.60	4,695	8.00	9,390
.60	2,120	2.00	3,285	3.80	4,885	9.00	10,640
.70	2,200	2.10	3,370	4.00	5,075	10.00	11,990
.80	2,280	2.20	3,455	4.20	5,265	11.00	13,430
.90	2,360	2.30	3,540	4.40	5,455	12.00	14,930
1.00	2,440	2.40	3,625	4.60	5,650	13.00	16,500
1.10	2,520	2.50	3,710	4.80	5,850	14.00	18,100
1.20	2,605	2.60	3,795	5.00	6,050	15.00	19,800
1.30	2,690	2.70	3,880	5.20	6,250		
1.40	2,775	2.80	3,970	5.40	6,450		
1.50	2,860	2.90	4,060	5.60	6,650		

NOTE.—The above table is based on discharge measurements made during 1903-1906, and is well defined below gage height 7 feet. Above gage height 14 feet the rating curve is a tangent, the difference being 170 per tenth.

Estimated monthly discharge of Oconee River at Dublin.

[Drainage area, 4,182 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1898 *a*					
February 11-28	2,429	1,746	2,040	0.49	0.33
March	4,360	1,746	2,582	.62	.71
April	11,260	2,080	5,011	1.20	1.34
May	4,460	1,140	1,794	.43	.49
June	2,012	890	1,201	.29	.32
July	7 840	865	3,104	.74	.85
August	12,514	2,500	5,697	1.36	1.57
September	27,904	2,012	10,648	2.55	2.84
October	18,100	1,878	7,449	1.78	2.05
November	16,960	2,500	7,097	1.70	1.90
December	14,224	4,360	7,338	1.75	2.02
1899 *a*					
January	17,302	4,070	10,736	2.57	2.96
February	25,510	8,638	14,954	3.58	3.73
March	19,240	7,498	12,188	2.91	3.36
April	11,032	5,332	7,639	1.83	2.04
May	6,016	2,429	3,420	.82	.94
June	2,644	1,300	1,862	.45	.50
July	5,560	1,015	1,669	.40	.46
August	5,674	962	2,097	.50	.58
September	3,490	890	1,630	.39	.44
October	9,664	865	2,628	.63	.72
November	4,888	1,015	1,666	.40	.45
December	6,244	1,746	3,047	.73	.84
The year	25,510	865	5,294	1.27	17.02
1900 *a*					
January	6,358	2,218	3,506	.84	.97
February	28,246	2,500	12,002	2.87	2.99
March	13,198	6,472	9,874	2.36	2.73
April	19,924	3,805	9,512	2.27	2.53
May	9,322	2,717	4,754	1.14	1.31
June	23,572	2,218	8,371	2.00	2.23
July	21,520	2,080	6,396	1.53	1.76
August	5,560	1,488	2,314	.55	.63
September	6,700	1,242	2,371	.57	.64
October	6,244	1,242	2,233	.53	.61
November	7,384	1,878	3,220	.77	.86
December	9,436	2,500	5,846	1.40	1.61
The year	28,246	1,242	5,867	1.40	18.87
1901 *a*					
January	15,706	5,105	9,396	2.25	2.60
February	17,872	4,670	9,315	2.23	2.32
March	18,670	3,490	6,494	1.55	1.79
April	25,624	4,287	12,344	2.95	3.29
May	9,094	2,742	4,250	1.02	1.18
June	12,856	4,199	8,065	1.93	2.15
July	8,524	2,559	4,258	1.02	1.18
August	11,602	2,080	5,999	1.43	1.65
September	21,976	2,125	8,035	1.92	2.14
October	5,674	2,173	3,046	.73	.84
November	2,742	2,223	2,369	.56	.62
December	9,664	2,329	4,435	1.06	1.22
The year	25,624	2,080	5,600	1.55	20,98

a Daily estimates of discharge above gage height 12 feet for the years 1898 to 1902, inclusive, are from 5 to 25 per cent. too low, owing to insufficient data to properly determine the upper part of the original rating curve. The error gradually increases with the increase of stage above 12 feet. The estimates for these years were not revised because the number of days when the gage height was more than 12 feet was relatively small and hence the monthly estimates are but slightly affected.

Estimated monthly discharge of Oconee River at Dublin—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1902 *a*					
January	17,302	3,090	6,315	1.51	1.74
February	22,660	4,480	9,813	2.35	2.45
March	29,272	6,700	16,243	3.88	4.47
April	19,924	4,090	9,942	2.38	2.66
May	6,130	2,140	3,436	.82	.95
June	5,010	1,585	2,685	.64	.71
July	6,130	1,135	2,567	.61	.70
August	4,900	1,270	2,318	.54	.62
September	4,690	900	1,904	.46	.51
October	3,490	1,180	2,203	.53	.61
November	6,130	1,370	2,189	.52	.58
December	11,082	2,075	5,134	1.23	1.42
The year	29,272	900	5,409	1.29	17.48
1903					
January	6,620	2,200	4,090	.98	1.13
February	34,920	4,040	16,766	4.01	4.18
March	24,040	6,500	12,704	3.04	3.50
April	20,470	4,200	10,120	2.42	2.70
May	13,845	3,195	5,701	1.36	1.57
June	16,435	2,970	6,537	1.56	1.74
July	8,180	1,930	4,016	.96	1.11
August	10,405	1,930	3,964	.95	1 10
September	12,635	1,530	3,563	.85	.95
October	4,790	1,580	2,044	.49	.56
November	4,360	1,800	2,501	.60	.67
December	4,280	1,995	2,634	.63	.73
The year	34,920	1,530	6,220	1.49	19.94
1904					
January	8,850	2,636	3,897	.932	1.07
February	11,500	3,130	6,599	1.58	1.70
March	7,710	3,130	4,717	1.13	1.30
April	3,969	2,312	2,766	.661	.738
May	2,312	1,154	1,899	.454	.523
June	3,130	874	1,449	.346	.386
July	1,998	810	1,169	.280	.323
August	7,820	1,154	3,617	.865	.997
September	2,392	695	1,131	.270	.301
October	750	560	609	.146	.168
November	1,611	695	1,205	.288	.321
December	3,969	1,154	2,329	.557	.642
The year	11,500	560	2,616	.626	8.47
1905					
January	6,050	1,960	3,021	.722	.832
February	27,450	2,120	11,260	2.69	2.80
March	8,550	3,200	5,082	1.22	1.41
April	6,350	2,440	3,506	.838	.935
May	6,870	1,800	3,538	.846	.975
June	3,455	1,240	1,947	.466	.520
July	6,550	1,240	2,839	.679	.783
August	6,055	810	2,685	.642	.740
September	3,970	750	1,346	.322	.359
October	1,960	690	1,019	.244	.281
November	2,775	945	1,346	.322	.359
December	19,120	1,320	8,121	1.94	2.24
The year	27,450	690	3,810	.911	12.23

a Daily estimates of discharge above gage height 12 feet for the years 1898 to 1902, inclusive, are from 5 to 25 per cent too low, owing to insufficient data to properly determine the upper part of the original rating curve. The error gradually increases with the increase of stage above 12 feet. The estimates for these years were not revised because the number of days when the gage height was more than 12 feet was relatively small and hence the monthly estimates are but slightly affected.

Estimated monthly discharge of Oconee River at Dublin—Continued.

Month	Discharge n second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1906					
January	26,900	4,510	11,800	2.82	3.25
February	17,900	4,150	6,920	1.66	1.78
March	24,000	3,710	10,400	2.49	2.87
April	12,000	2,360	4,990	1.19	1.33
May	4,150	2,200	2,810	.672	.77
June	26,100	1,880	7,480	1.79	2.00
July	12,300	2,360	6,820	1.63	1.88
August	10,500	2,780	5,910	1.41	1.63
September	8,790	2,200	4,190	1.00	1.12
October	12,400	1,880	5,280	1.26	1.45
ovember	3,970	1,800	2,540	.608	.68
December	6,350	2,200	3,320	.794	.92
The year	26,900	1,800	6,040	1.44	19.63

NOTE.—Values for 1906 are probably excellent except those for May which are fair, owing to erroneous gage heights.

APALACHEE RIVER NEAR BUCKHEAD.

This station was established February 13, 1901, by M. R. Hall. It is located at the iron wagon bridge over Apalachee River, about 3½ miles north of Buckhead.

At ordinary stages the channel is about 80 feet wide, and is only slightly curved above and below the bridge. The bed of the stream is part rock and part sand. The current is moderately swift and is somewhat broken and irregular on account of the ruins of old pier bases about 50 feet upstream. The right bank is low for a distance of 400 feet and will overflow at a gage height of 10 feet. The low portion is thickly covered with trees and a brushy growth, which will greatly retard the flood water passing over it. The left bank is high and will not overflow, except to a short distance up the steep slope.

Discharge measurements are made from the downstream side of the bridge, the initial point being the outside of the iron pier at the left bank, downstream side. The bridge is a single span 103 feet long, supported by tubular piers. Its trestle approaches are about 500 feet long on the right bank and about 100 feet on the left.

The original gage consisted of two sections. The first section, reading from 0 to 10 feet, was fastened to a small ash tree on the left bank about 100 feet below the bridge, and the second, reading from 6 to 20 feet, was nailed to the upstream post of the last wooden bent next to the iron bridge, on the right bank. March 22, 1905, a standard chain gage was attached to the upstream side of the bridge, in the third panel from the right bank; length of the chain, 30.70 feet. The gage is read once each day by G. A. J. Adams, except for three months during low water, when readings are made twice each

day. Bench marks were established as follows: (1) The top of the downstream end of the first floor beam from the right bank; elevation, 25.50 feet above datum of gage. (2) A copper plug set in solid rock 10 feet west of the upstream tubular pier on the right bank and 3 feet upstream from the line of the upper edge of the bridge; elevation, 3.73 feet above datum of gage.

Discharge measurements of the Apalachee River near Buckhead.

Date	Gage height	Discharge	Date	Gage height	Discharge
1901	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft.*
February 13	3.78	847	August 9	7.15	1,877
February 19	3.00	617	August 9	7.30	1,903
March 20	4.62	1,033	September 21	.90	128
May 32	6.45	1,658	October 13	.80	91
August 9	2.56	545	October 13	.80	94
November 1	1.80	302	November 26	1.39	186
1902			November 26	1.34	167
February 8	3.95	821	1905		
June 7	1.52	262	March 23	2.30	379
July 19	1.50	253	May 11	1.74	273
1903			June 8	1.44	223
January 15	2.33	444	June 8	1.41	208
May 27	1.88	361	September 8	1.13	157
June 12	3.07	643	September 8	1.13	157
July 25	1.51	266	October 30	.80	97
August 28	1.31	214	October 31	1.38	185
October 9	1.45	237	November 15	1.39	183
December 1	1.00	255	1906		
1904			February 10	3.28	645
March 19	2.39	466	April 28	2.51	488
May 12	1.83	311	June 28	2.01	383
July 13	1.48	223	August 17	3.36	714
			October 17	1.99	325

Daily gage height, in feet, of Apalachee River near Buckhead.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1901												
1			2.6	4.9	2.7	6.1	3.5	2.0	3.5	2.2	1.7	1.9
2			2.6	5.3	2.6	3.6	3.0	1.9	3.0	2.2	1.7	2.0
3			2.6	14.0	2.6	3.1	2.7	1.8	2.8	2.4	1.7	2.0
4			2.6	13.8	2.5	3.0	2.6	1.9	2.6	2.5	1.75	2.5
5			2.5	7.5	2.5	2.9	2.5	1.8	2.4	2.6	1.9	2.4
6			2.5	5.3	2.6	2.8	2.4	1.8	2.2	2.4	1.9	2.2
7			2.4	4.5	2.5	8.5	2.1	2.0	2.1	2.2	1.8	2.1
8			2.4	4.0	2.4	8.5	2.0	6.5	2.1	2.2	1.8	2.0
9			2.4	3.6	2.4	3.5	2.9	2.7	2.0	2.1	1.8	2.2
10			2.5	3.4	2.3	3.1	2.5	2.5	2.0	2.1	1.8	3.0
11			4.5	3.2	9.3	2.9	2.4	4.0	1.9	2.0	1.8	2.8
12			5.7	3.1	2.2	2.8	2.3	6.0	1.9	1.9	1.8	2.2
13		3.78	3.5	3.1	2.6	2.7	2.1	3.5	1.8	1.9	1.8	2.2
14			3.0	7.0	2.4	4.0	2.0	3.1	1.8	1.85	1.85	2.1
15			2.7	6.7	2.3	4.5	1.9	3.0	1.8	1.85	1.85	8.0
16			2.6	5.5	2.2	4.5	3.0	5.0	1.9	1.8	1.8	7.0
17			2.5	4.1	2.2	6.0	2.7	10.5	4.0	1.8	1.8	6.0
18			2.5	3.7	2.1	4.5	2.5	5.7	10.5	1.8	1.8	4.5
19		3.0	2.4	3.9	2.4	4.0	4.0	4.5	12.5	1.8	1.9	4.1
20			2.4	5.0	2.8	3.8	6.0	4.0	7.0	1.8	2.1	4.0
21			2.7	4.3	4.4	3.5	6.0	4.0	5.0	1.8	2.1	3.8
22			2.6	3.5	6.8	3.2	3.0	4.5	3.2	1.8	2.2	3.6
23			2.5	3.3	3.5	3.5	2.5	4.0	3.0	1.8	2.2	3.6
24			2.9	3.2	3.0	2.8	2.2	3.5	2.8	1.75	2.0	4.2
25			3.0	3.1	2.6	2.5	2.1	4.0	2.7	1.75	1.9	3.9
26			7.5	3.0	2.4	5.0	2.6	3.8	2.6	1.75	1.9	3.6
27			11.5	2.9	2.3	4.0	2.9	3.6	2.4	1.75	1.9	3.6
28			8.0	2.9	2.3	2.9	3.0	4.5	2.2	1.75	1.9	4.5
29			7.0	2.8	2.2	3.8	3.0	7.0	2.4	1.75	1.9	6.5
30			6.0	2.7	2.2	4.0	2.5	5.5	2.2	1.75	1.9	13.0
31			6.3		3.5		2.2	3.8		1.7		15.5

Daily gage height, in feet, of Apalachee River near Buckhead—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1902												
1	11.0	6.2	25.0	8.0	2.6	1.75	1.6	1.8	1.6	2.5	1.5	2.8
2	7.0	17.5	20.0	5.5	2.8	1.75	1.6	1.6	1.5	2.0	1.5	3.1
3	5.5	20.0	15.0	4.5	2.7	1.75	2.1	4.0	1.5	1.9	1.5	3.5
4	4.5	15.0	10.0	4.0	2.7	1.7	2.0	4.5	1.5	1.8	1.6	5.0
5	4.2	11.0	7.0	3.8	2.6	1.7	1.8	4.0	1.4	1.8	1.6	4.5
6	4.1	8.0	6.0	3.7	2.6	1.7	1.7	3.0	1.4	1.8	1.6	3.5
7	4.0	6.0	5.0	4.5	2.5	1.7	1.6	2.7	1.6	1.8	1.5	3.2
8	3.8	4.0	4.0	4.0	2.4	4.0	1.55	2.5	1.8	1.7	1.5	3.1
9	3.7	3.9	3.5	3.8	2.4	7.5	1.5	2.2	1.7	1.7	1.5	3.0
10	3.5	3.8	3.5	3.6	2.3	4.0	1.5	2.0	1.7	1.7	1.5	3.0
11	3.4	3.8	3.3	3.5	2.3	3.0	1.6	1.9	1.9	1.7	1.45	2.8
12	3.2	3.8	3.3	3.5	2.3	2.7	2.0	1.85	2.0	1.7	1.45	2.5
13	3.1	3.7	3.8	3.5	2.3	2.4	1.9	1.8	2.5	1.7	1.45	2.2
14	3.0	3.7	4.5	3.4	2.4	2.1	6.0	1.75	4.0	1.7	1.45	2.1
15	2.9	3.7	5.0	3.4	2.4	2.0	3.0	1.7	3.8	1.7	1.4	3.0
16	2.9	3.7	6.5	3.3	2.4	4.5	2.5	1.7	3.4	1.6	1.4	3.5
17	2.8	3.8	10.0	3.3	2.3	3.8	2.3	1.6	3.0	1.6	1.5	3.2
18	2.8	3.9	7.5	4.5	2.3	2.8	2.1	1.6	2.8	1.6	1.7	3.0
19	2.8	3.9	6.0	4.3	2.3	2.5	2.0	1.5	2.8	1.6	1.6	2.8
20	2.8	3.8	5.5	4.0	2.2	2.2	1.9	1.5	3.2	1.6	1.6	2.7
21	2.7	3.7	5.2	3.8	2.2	2.0	1.8	1.5	3.0	1.55	1.6	2.6
22	2.7	3.7	5.0	3.6	2.1	1.9	1.75	1.4	2.8	1.55	1.6	3.6
23	2.6	3.8	4.8	3.4	2.1	1.9	1.7	1.4	2.7	1.5	1.6	3.0
24	2.6	3.9	4.7	3.2	2.0	1.8	1.65	1.2	2.7	1.5	2.0	2.9
25	2.8	4.0	4.5	3.0	1.9	1.8	1.6	1.1	3.0	1.5	2.1	2.7
26	3.0	5.0	4.3	2.7	1.9	1.75	1.5	1.0	3.0	1.5	2.0	2.6
27	3.2	16.0	3.8	2.8	1.85	1.7	1.6	1.2	2.8	1.8	2.0	2.6
28	3.6	20.0	4.4	2.7	1.8	1.7	2.1	1.3	2.8	1.8	1.9	2.5
29	3.7	.....	4.5	2.7	1.8	1.65	2.6	1.5	2.7	1.7	2.1	2.5
30	4.0	.....	7.0	2.7	1.75	1.65	2.1	1.6	3.5	1.7	2.6	3.2
31	4.5	.....	12.0	.....	1.75	.....	1.9	1.6	.....	1.6	.....	3.0
1903												
1	2.8	2.5	7.8	8.8	2.7	4.0	2.2	1.2	1.1	1.7	1.2	1.9
2	2.6	3.1	7.0	5.7	2.6	10.0	2.0	3.4	.9	1.7	1.2	1.9
3	2.5	3.4	6.0	5.0	2.7	8.5	2.1	5.1	1.6	1.7	1.9	1.9
4	2.8	4.2	4.5	4.5	3.1	4.4	2.2	4.7	1.5	1.7	2.9	1.9
5	2.6	4.5	4.2	4.4	3.4	5.5	2.0	2.9	1.5	1.8	2.7	1.8
6	2.7	5.5	4.0	4.2	2.8	9.0	2.4	3.1	1.4	1.1	2.4	1.9
7	2.6	5.9	4.0	4.1	2.7	9.2	2.0	2.1	.9	1.8	2.4	1.9
8	2.4	17.0	4.0	5.0	2.6	4.5	6.2	1.9	.9	1.7	2.0	1.8
9	2.4	15.0	3.8	9.5	2.7	3.8	4.2	1.8	1.2	1.7	1.4	2.0
10	2.0	11.0	5.5	7.0	2.6	3.2	2.3	1.6	1.5	1.7	2.0	2.0
11	2.0	10.0	7.0	4.9	2.5	4.0	2.7	1.7	1.4	1.5	2.0	2.0
12	3.0	13.0	5.0	4.2	2.4	3.7	2.5	1.6	1.3	1.4	1.9	2.0
13	2.9	9.0	4.4	3.8	2.4	3.5	4.2	1.9	1.2	1.7	1.8	2.0
14	2.6	7.1	4.0	6.0	2.7	2.7	8.5	1.9	1.3	1.7	1.9	1.8
15	2.4	5.2	3.9	4.9	3.2	2.5	10.0	2.4	1.9	1.7	1.9	1.9
16	2.3	4.5	3.8	4.5	4.6	2.3	3.8	3.3	7.5	1.9	1.8	1.9
17	2.3	7.2	3.6	3.9	4.0	2.1	2.7	3.5	8.5	1.8	1.9	1.9
18	2.2	6.5	3.4	3.5	2.8	2.1	2.7	7.0	4.3	2.1	2.0	1.8
19	2.2	5.2	3.2	3.0	2.5	2.0	2.3	3.7	2.5	1.8	2.0	1.9
20	2.15	4.5	3.0	3.1	2.4	2.0	2.1	2.3	2.1	1.9	1.9	1.9
21	2.4	4.0	3.1	3.5	2.3	2.6	2.1	2.2	1.9	1.8	1.9	1.8
22	2.3	4.0	7.0	3.2	2.2	2.7	2.0	2.1	1.8	1.8	2.0	1.9
23	2.3	3.6	10.0	3.0	2.2	2.2	1.9	1.8	1.7	1.7	1.5	1.9
24	2.2	3.2	15.0	2.9	2.2	2.0	1.8	1.7	1.6	1.7	1.9	1.8
25	2.2	2.9	13.2	2.8	2.1	1.9	1.8	1.8	1.8	1.5	1.9	1.8
26	2.1	3.0	7.0	3.5	2.0	2.0	1.7	1.9	1.9	1.8	2.0	1.8
27	2.0	3.1	4.9	3.4	1.9	2.8	1.6	1.7	1.8	1.8	2.0	1.7
28	3.0	6.2	4.1	3.0	1.8	2.8	1.5	1.6	1.5	1.7	2.0	1.7
29	2.8	.....	4.5	2.8	1.9	3.0	1.4	1.3	1.6	1.5	1.5	1.8
30	2.5	.....	8.0	2.7	2.0	3.4	1.4	1.5	1.7	1.4	1.9	1.9
31	2.4	.....	11.0	.....	2.0	.....	1.3	1.4	.....	1.3	.....	1.9

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Daily gage height, in feet, of Apalachee River near Buckhead—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
1	1.8	1.9	2.4	2.2	1.9	2.3	2.0	1.7	1.5	0.65	0.95	1.4
2	1.8	1.8	2.5	2.4	1.5	2.1	1.8	1.9	1.5	.65	1.25	1.5
3	1.9	1.8	2.5	2.2	1.8	1.5	1.3	2.1	1.4	a.5	1.2	1.9
4	1.8	1.9	2.4	2.1	1.9	1.3	1.4	3.0	1.6	.65	1.9	1.65
5	1.7	2 0	2.3	2.0	1.6	1.5	1.3	2.7	2.8	.65	1.85	2.25
6	1.7	2.1	2.4	2.0	1.7	1.4	1.2	2.4	2.3	.65	1.5	2.75
7	1 6	2.1	3.6	2.2	1.8	1.3	1.1	3.0	1.9	.75	a1.0	3.55
8	1.6	3.1	5.7	2.8	1.9	2.9	1.0	4.5	1.7	.8	1.45	2.65
9	1.5	4.0	4.8	4.0	2.0	2.4	3.0	5.7	1.6	.65	1.4	2.15
10	1.8	4.5	3.4	2.9	2.5	1.9	1.9	9.9	1.4	a.45	1.25	1.9
11	1.9	7.0	3.0	2.4	2.1	1.6	1.8	6.7	1.3	.65	1.35	1.8
12	1.9	6.5	2.8	2.3	2.0	1.6	1.7	6.4	1.3	.65	1.35	1.8
13	2.0	5.5	2.5	2.3	1.8	1.5	1.6	2 5	1.4	.6	1.9	1.7
14	2.0	3.1	2.3	2.2	1.7	1.5	1.5	2.6	1.4	.6	1.8	1.7
15	2.0	3.0	3.5	2.1	1.9	1.4	1.4	2.3	1.3	.65	1.85	1.7
16	2.0	2.8	3.3	2.0	1.8	1.4	1.2	3.5	1.2	.65	1.75	1.8
17	2.2	2.4	2.8	1.9	1.8	1.3	1.0	4.5	1.0	a.45	1.7	1.8
18	2.1	2.2	2.6	2.0	1.8	1.3	.8	2.6	.85	.55	1.7	2.0
19	2.1	2 5	2.4	2.1	1.7	1.0	1.0	2.8	a.65	.65	1.65	1.8
20	2.0	3.3	2.3	2.2	1.7	.7	1.2	2.0	.8	.65	1.45	1.9
21	2.1	4.0	2.2	2.3	1.6	2.0	1.0	1.7	.8	.65	a1.0	1.8
22	2.2	5.1	3.0	2.2	1.5	1.7	1.6	1.5	.8	.65	1.45	1.7
23	6.0	6.8	3.2	2.1	1.5	1.5	1.6	2.0	.75	.6	1.75	1.7
24	6.5	5.0	3.1	2.0	1.4	1.4	2.0	2.1	.75	a.4	1.65	1.6
25	2.7	3.5	2.9	1.9	1.4	1.3	1.2	2.3	.75	7	1.7	1.5
26	2.5	3.0	2.7	2.1	1.4	1.3	1.6	2.0	a.55	.85	1.5	1.6
27	2.4	2.8	3.0	2.2	1.3	1.2	1.5	1.7	.6	1.4	1.45	1.6
28	2 4	2.6	2.7	2.3	1.3	1.2	1.5	2.0	1.05	1.05	a1.25	3.0
29	2.3	2.5	2.5	2.2	1.3	1.6	1.6	1.7	.9	.9	1.5	3.2
30	2.0	.....	2.4	2.1	1.2	2.5	1.6	1.6	.75	.95	1.45	2.5
31	2.0	.....	2.3	.....	1.8	.....	1.5	1.6	.....	a.65	.....	2.2
1905												
1	2.0	1.8	2.8	2.0	2.4	2.0	2.8	1.5	1.05	0.86	1.3	1.4
2	1.8	1.9	2.7	1.9	2.1	1.8	6.4	1.4	2.7	a.52	1.15	1.55
3	2.2	1.9	2.6	1.8	2.2	1.95	9.0	1.35	3.1	.62	1.1	4.6
4	2.0	1.8	2.5	2.0	3.5	2.1	3.3	1.3	2.1	1.05	1.1	13.7
5	1.9	1.9	2.5	2.2	3.3	1.65	2.0	1.25	1.72	1.45	1.1	10.5
6	1.8	2.0	2.4	2.2	3.4	1.85	2.3	1.0	1.4	1.3	a.71	5.5
7	2.2	2.5	2.4	2.25	2.4	1.65	5.4	a.4	1.15	1.15	1.35	2.95
8	2.1	3.4	2.3	2.25	2.5	1.55	10.2	1.0	1.1	1.1	1.3	3.2
9	2.1	4.5	2.5	2.25	2.25	1.5	5.5	1.95	1.0	a.51	1.25	6.4
10	2.0	5.6	2.5	2.25	2.2	1.45	3.0	4.3	.92	1.25	1.4	9.7
11	2.0	6.2	2.4	2.3	2.2	1.35	2.65	4.4	a.65	1.3	2.6	9.0
12	2.1	7.8	2.6	2.25	1.9	85	2.7	4.4	.91	1.3	2.3	5.0
13	4.7	9.0	2.7	2.25	1.8	1.35	2.75	5.3	.94	1.25	1.95	4.2
14	5.0	11.4	3.1	2.2	1.7	1.4	2.6	3.6	.88	1.25	1.6	3.6
15	4.2	9.0	2.8	2.2	1.5	1.35	2.35	4.7	.95	1.2	1.55	3.6
16	3.0	5.3	2.7	2.2	2.1	1.35	1.9	3.4	.92	a.68	1.45	4.7
17	2.6	4.2	2.5	1.9	2.2	2.05	1.5	2.7	.88	1.2	1.45	3.8
18	2.2	3.7	2.4	2.2	2.0	1.5	1.75	7.6	a.52	1.15	1.45	3.0
19	2.3	3.3	2.2	2.0	1.8	1.0	1.7	2.7	.85	1.15	1.35	2.7
20	2.3	3.3	1.9	2.0	1.7	1.5	3.6	2.3	.73	1.1	1.0	4.2
21	2 2	5.6	2.4	1.9	1.5	1.35	1.95	1.65	.66	1.1	1.5	11.0
22	2.1	7.3	2.5	2.0	1.2	3.8	1.7	1.9	.75	.92	1.4	14.0
23	2.0	6.0	2.4	1.9	2.1	4.6	1.7	1.8	.82	a.59	1.4	9.9
24	1.9	4.8	2.35	1.8	3.3	3.4	1.0	1.7	.78	1.15	1.35	5.7
25	1.9	3.4	2.3	1.9	4.7	3.3	2.15	1.6	a.41	1.1	1.3	4.2
26	1.8	3.2	2.25	2.0	4.7	2.2	2.1	1.55	.63	1.15	1.3	3.7
27	1.8	3.0	2.2	1.9	3.1	1.85	1.75	1.4	.6	1.15	1.35	3.4
28	1.9	2.9	2.2	1.9	2.5	3.1	1.6	a.78	.67	1.1	1.65	3.8
29	1.9	.....	2.2	1.8	2.9	2.35	1.5	1.2	.65	1.1	1.55	4.2
30	1.8	.....	2.2	1.7	3.1	1.95	1.4	1.1	.65	a.85	1.4	4.0
31	1.8	.....	2.0	.....	2.2	.....	1.65	1.0	.....	1.35	.....	4.0

a During low water the Monday gage heights are lower than natural flow on account of storing water on Sunday at High Shoals Factory, 25 miles above this station.

Daily gage height, in feet, of Apalachee River near Buckhead—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
1	3.5	4.2	2.5	4.9	2.9	2.05	2.3	9.0	2.6	3.5	2.3	2.1
2	4.2	3.9	2.55	4.3	2.6	2.0	2.1	5.4	4.0	4.8	2.35	2.15
3	4.8	3.6	2.7	3.8	2.35	4.5	2.5	3.8	3.2	5.7	2.3	2.2
4	13.0	3.4	2.95	3.6	2.3	3.6	3.1	4.3	2.5	7.2	2.3	2.3
5	14.2	3.3	2.7	3.4	2.4	2.6	2.5	6.2	2.35	6.1	2.3	2.3
6	9.8	3.4	2.7	3.3	2.3	2.35	2.0	4.2	2.25	4.8	2.3	2.3
7	6.4	3.4	2.9	3.2	3.3	2.2	2.15	3.5	2.2	3.5	2.3	2.4
8	5.2	3.5	3.7	3.0	4.4	2.1	3.6	3.4	2.15	3.1	2.3	2.5
9	4.9	3.4	6.3	2.95	3.7	2.0	10.0	3.6	1.9	2.7	2.35	2.2
10	4.1	3.3	6.4	4.8	2.8	2.05	8.7	2.7	1.7	2.65	2.35	2.35
11	3.3	3.3	4.3	4.1	2.45	2.1	3.5	2.85	2.0	2.55	2.35	2.85
12	3.8	3.2	2.5	3.5	2.3	2.3	3.6	2.65	2.35	2.5	2.6	3.4
13	4.7	3.1	2.85	3.1	2.25	7.6	2.9	2.4	3.1	2.4	2.55	3.0
14	4.2	3.0	3.0	2.5	2.2	11.5	2.4	2.7	2.7	2.2	2.5	2.75
15	3.7	3.0	7.0	3.9	2.15	13.1	4.2	7.0	2.3	2.2	2.6	2.6
16	3.5	2.95	12.5	3.4	2.15	13.2	6.7	7.7	1.9	2.3	2.55	2.2
17	3.4	2.8	10.5	3.1	2.1	10.5	5.4	3.6	1.7	2.2	2.5	1.9
18	3.1	2.8	6.0	2.9	2.1	13.9	7.5	3.1	2.1	2.15	3.0	2.45
19	3.0	2.6	7.2	2.75	2.1	8.0	9.6	3.8	5.7	2.5	3.5	2.6
20	3.1	2.7	14.8	2.6	2.0	4.0	5.8	3.0	6.0	2.7	3.8	3.5
21	2.9	3.1	15.3	2.6	1.9	3.4	4.1	2.9	6.8	2.5	3.1	3.8
22	6.3	3.2	9.4	2.6	2.05	3.0	3.2	2.8	5.2	2.3	2.7	3.5
23	19.9	3.9	5.7	2.45	2.05	2.8	6.0	2.85	4.3	2.45	2.65	3.1
24	15.1	2.75	4.7	2.45	2.1	2.6	5.8	2.95	3.8	2.45	2.6	2.6
25	8.0	2.7	3.6	2.5	2.2	2.4	6.4	3.1	3.4	2.5	2.45	2.4
26	7.8	2.7	3.0	2.5	2.35	3.4	3.2	2.4	3.3	2.4	2.4	2.35
27	9.4	2.7	3.1	2.5	2.55	2.85	2.7	3.4	3.5	2.3	2.4	2.3
28	8.3	2.6	4.5	2.6	2.5	2.45	2.55	3.6	3.6	2.3	2.4	2.85
29	6.8	.....	5.1	3.0	2.4	2.4	3.0	3.5	3.8	2.3	2.3	3.55
30	5.5	.....	5.2	4.1	2.2	2.3	6.2	3.6	3.1	2.35	2.15	3.8
31	4.8	.....	6.9	.....	2.1	.....	8.2	2.95	.....	2.2	.....	4.6

Rating tables for Apalachee River near Buckhead.

MARCH 1 TO DECEMBER 31, 1901.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.70	280	3.70	827	5.70	1,377	9.40	2,396
1.80	305	3.80	855	5.80	1,405	9.60	2,450
1.90	333	3.90	882	5.90	1,432	9.80	2,505
2.00	360	4.00	910	6.00	1,460	10.00	2,560
2.10	388	4.10	937	6.20	1,515	10.50	2,697
2.20	415	4.20	965	6.40	1,570	11.00	2,835
2.30	442	4.30	992	6.60	1,625	12.00	3,110
2.40	470	4.40	1,020	6.80	1,680	13.00	3,385
2.50	497	4.50	1,047	7.00	1,735	14.00	3,660
2.60	525	4.60	1,075	7.20	1,790	15.00	3,935
2.70	552	4.70	1,102	7.40	1,845	16.00	4,210
2.80	580	4.80	1,130	7.60	1,900	17.00	4,485
2.90	607	4.90	1,157	7.80	1,955	18.00	4,760
3.00	635	5.00	1,185	8.00	2,010	19.00	5,035
3.10	662	5.10	1,212	8.20	2,065	20.00	5,310
3.20	690	5.20	1,240	8.40	2,120	21.00	5,585
3.30	717	5.30	1,267	8.60	2,175	22.00	5,860
3.40	745	5.40	1,295	8.80	2,230	23.00	6,135
3.50	772	5.50	1,322	9.00	2,285	24.00	6,410
3.60	800	5.60	1,350	9.20	2,340	25.00	6,685

JANUARY 1 TO DECEMBER 31, 1902.[a]

1.00	205	1.40	241	1.80	310		
1.20	219	1.60	271	2.00	360		

a Above gage height 2.0 feet this table is the same as the 1901 table.

Rating tables for Apalachee River near Buckhead—Continued.

JANUARY 1 TO DECEMBER 31, 1903.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.90	170	1.20	208	1.50	248	1.80	310
1.00	180	1.30	216	1.60	267		
1.10	191	1.40	231	1.70	288		

JANUARY 1 TO DECEMBER 31, 1904.[b]

0.40	43	1.40	216	2.60	514	4.40	1,025
.50	55	1.50	238	2.80	568	4.60	1,085
.60	69	1.60	261	3.00	622	4.80	1,145
.70	84	1.70	284	3.20	678	5.00	1,205
.80	100	1.80	308	3.40	734	6.00	1,505
.90	117	1.90	333	3.60	791	7.00	1,805
1.00	135	2.00	358	3.80	849	8.00	2,105
1.10	154	2.20	409	4.00	907	9.00	2,405
1.20	174	2.40	461	4.20	965	10.00	2,705
1.30	195						

JANUARY 1 TO DECEMBER 31, 1905.[c]

0.40	44	2.10	358	3.70	820	6.60	1,680
.50	54	2.20	384	3.80	850	6.80	1,750
.60	66	2.30	410	3.90	880	7.00	1,810
.70	78	2.40	436	4.00	910	7.20	1,870
.80	92	2.50	464	4.20	970	7.40	1,930
.90	108	2.60	492	4.40	1,030	7.60	1,990
1.00	124	2.70	520	4.60	1,090	7.80	2,050
1.10	142	2.80	550	4.80	1,150	8.00	2,110
1.20	160	2.90	580	5.00	1,210	8.50	2,260
1.30	180	3.00	610	5.20	1,270	9.00	2,410
1.40	200	3.10	640	5.40	1,330	9.50	2,560
1.50	220	3.20	670	5.60	1,390	10.00	2,710
1.60	242	3.30	700	5.80	1,450	11.00	3,010
1.70	264	3.40	730	6.00	1,510	12.00	3,310
1.80	286	3.50	760	6.20	1,570	13.00	3,610
1.90	310	3.60	790	6.40	1,630	14.00	3,910
2.00	334						

a Above gage height 1.8 feet this table is the same as the 1902 table.
b Above gage height 4.2 feet the rating curve is a tangent, the difference being 30 per tenth.
c Above gage height 2.70 feet the rating curve is a tangent, the difference being 30 per tenth.

JANUARY 1 TO DECEMBER 31, 1906.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.70	264	2.20	384	2.70	520	3.20	670
1.80	286	2.30	410	2.80	550	3.30	700
1.90	310	2.40	436	2.90	580	3.40	730
2.00	334	2.50	464	3.00	610	3.50	760
2.10	358	2.60	492	3.10	640		

NOTE.—The above table is based on discharge measurements made during 1903-1906, and is fairly well defined below gage height 7.3 feet. Above gage height 3 feet the rating curve is a tangent, the difference being 30 per tenth.

Estimated monthly discharge of Apalachee River near Buckhead.

[Drainage area 440 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1901					
March	2,972	470	847	1.92	2.21
April	3,660	552	1,123	2.55	2.84
May	1,680	388	553	1.26	1.45
June	2,147	552	910	2.07	2.31
July	1,460	333	582	1.32	1.52
August	2,697	305	896	2.04	2.35
September	3,247	305	711	1.62	1.81
October	525	280	349	.79	.91
November	415	280	326	.74	.83
December	5,772	333	1,027	2.33	2.69
1902					
January	2,835	525	842	1.91	2.20
February	5,310	827	1,708	3.88	4.04
March	6,685	717	1,714	3.90	4.50
April	2,010	552	843	1.92	2.14
May	580	300	448	1.02	1.18
June	1,322	280	469	1.07	1.19
July	1,460	256	375	.85	.98
August	1,047	205	368	.84	.97
September	910	241	495	1.12	1.25
October	497	256	294	.67	.77
November	525	241	298	.68	.76
December	1,185	388	641	1.46	1.68
The year	6,685	205	708	1.61	21.66
1903					
January	635	360	481	1.09	1.26
February	4,485	497	1,522	3.46	3.60
March	3,935	635	1,406	3.20	3.69
April	2,422	552	1,009	2.29	2.55
May	1,075	310	520	1.18	1.36
June	2,560	334	854	1.94	2.16
July	2,560	216	598	1.35	1.56
August	1,735	203	495	1.12	1.29
September	2,147	170	407	.93	1.04
October	388	191	287	.65	.75
November	607	203	348	.79	.88
December	360	288	328	.75	.86
The year	4,485	170	688	1.56	21.00
1904					
January	1,655	238	438	0.995	1.15
February	1,805	308	751	1.71	1.84
March	1,415	409	596	1.35	1.56
April	907	333	425	.966	1.08
May	487	174	286	.650	.749
June	595	84	264	.600	.669
July	622	100	239	.543	.626
August	2,675	238	647	1.47	1.70
September	568	a 62	187	.425	.474
October	216	a 43	84.1	.191	.220
November	333	a 126	240	.545	.608
December	776	216	363	.825	.951
The year	2,675	43	377	.856	11.00

a See note to gage-height table.

Estimated monthly discharge of Apalachee River near Buckhead—Continued.

Month	Discharge in second-feet			Run off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1905					
January	1,210	286	423	.961	1.11
February	3,120	286	1,074	2.44	2.54
March	640	310	448	1.02	1.18
April	410	264	346	.786	.877
May	1,120	160	469	1.07	1.23
June	1,090	100	345	.784	.875
July	2,770	124	624	1.42	1.64
August	1,990	a 44	462	1.05	1.21
September	640	a 45	145	.330	.368
October	210	a 55	139	.316	.364
November	492	a 79	209	.475	.530
December	3,910	200	1,371	3.12	3.60
The year	3,910	a 44	505	1.15	15.52
1906					
January	5,680	580	1,650	3.75	4.32
February	970	492	658	1.50	1.56
March	4,300	464	1,380	3.14	3.62
April	1,180	450	675	1.53	1.71
May	1,030	310	449	1.02	1.18
June	3,880	334	1,110	2.52	2.81
July	2,710	334	1,090	2.48	1.86
August	2,410	436	894	2.03	2.34
September	1 750	264	674	1.53	1.71
October	1,870	371	623	1.42	1.64
November	850	371	478	1.09	1.22
December	1,090	310	538	1.22	1.41
The year	5,680	264	852	1.94	26.33

NOTE.—At times the accuracy of the above results may be more or less affected by daily fluctuations caused by stored water above, but otherwise the results can, in general, be accepted as excellent.

OHOOPEE RIVER NEAR REIDSVILLE.

This station was established June 13, 1903, by F. A. Murray. It is located at the wooden highway bridge, known as Sheppards Bridge, 4½ miles west of Reidsville.

Discharge measurements are made from the downstream side of the bridge. The initial point for soundings is the outer edge of the first crossbeam at the left end of the bridge, downstream side. The original gage consisted of two 5-foot sections spiked to the bridge and a third section fastened to a cypress tree on the left bank above the bridge. June 10, 1905, the gage was changed to the right side of the second bent from the left bank; it is fastened to the bent in four 5-foot sections. The gage is read by J. D. Swain, who is paid by the Georgia Geological Survey. Bench marks were established as follows: (1) The top of the cap of the fifth bent from the left end of the bridge on the upstream side, opposite a point 106 feet from the initial point for soundings; elevation, 20.00 feet; (2) two

nails driven horizontally into the downstream side of a cypress tree on the left bank, about 120 feet above the bridge; elevation, 8.00 feet. Elevations refer to datum of gage.

Discharge measurements of Ohoopee River near Reidsville.

Date	Gage height	Discharge	Date	Gage height	Discharge
1903	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft.*
June 13	12.47	5,762	September 15	3.00	454
June 24	6.41	1,692	October 31*a*	.32	52
July 16	10.34	3,667	December 1	1.56	190
July 16	10.46	3,756	1905		
August 22	14.00	6,441	March 16	11.90	4,204
October 8	2.84	476	March 17	11.90	4,163
October 8	2.85	462	April 27	6.38	1,635
November 19	4.96	1,131	June 10	1.01	114
December 30	6.69	1,836	July 28	2.31	363
1904			November 8*b*	.36	57
February 19	10.19	3,611	November 8*b*	.34	56
April 13	4.53	1,038	1906		
July 23	2.28	369	March 8	7.75	2,220
September 13	4.20	823	May 26	3.57	642
September 13	4.20	858	August 30	9.09	3,130
September 14	3.63	628			
September 15	3.00	470			

a Wading 1,000 feet above the bridge. Three narrow channels.
b Made at different section.

Daily gage height, in feet, of Ohoopee River near Reidsville.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1							8.6	2.0	4.6	3.3	2.4	3.9
2							8.3	2.1	4.3	3.1	2.4	3.7
3							8.4	2.7	4.5	2.9	2.4	3.6
4							7.7	3.4	4.0	2.8	3.1	3.4
5							6.8	3.7	3.5	2.6	3.9	3.3
6							6.0	4.0	3.4	2.5	4.6	3.2
7							5.5	3.9	3.2	2.7	5.2	3.1
8							5.5	3.3	3.5	2.9	5.3	3.1
9							5.7	3.1	3.5	2.9	5.7	3.3
10							6.0	3.6	3.2	2.7	5.0	3.4
11							7.3	4.2	2.3	2.6	5.1	3.6
12							6.6	5.3	2.4	2.3	4.8	3.6
13							6.5	4.6		2.2	4.7	3.5
14							7.4	3.8		2.1	4.1	3.5
15							9.7	3.8		2.0	5.3	3.4

Daily gage height, in feet, of Ohoopee River near Reidsville—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
16	.....	.....	.....	.....	.....	.....	10.6	8.3	.....	2.0	5.4	3.3
17	.....	.....	.....	.....	.....	.....	9.5	10.3	.....	2.2	5.6	3.3
18	.....	.....	.....	.....	.....	.....	9.6	9.9	.....	5.0	5.4	3.1
19	.....	.....	.....	.....	.....	.....	10.3	10.3	.....	6.7	5.0	3.0
20	.....	.....	.....	.....	.....	.....	9.5	14.0	10.8	6.9	4.7	2.9
21	.....	.....	.....	.....	.....	.....	8.1	13.8	10.5	6.5	4.5	3.0
22	.....	.....	.....	.....	.....	.....	6.7	14.0	8.4	5.7	4.4	3.3
23	.....	.....	.....	.....	.....	.....	5.7	13.2	7.2	5.0	4.3	3.3
24	.....	.....	.....	.....	.....	6.5	4.7	12.0	6.5	4.6	4.1	3.2
25	.....	.....	.....	.....	.....	6.7	4.0	11.4	6.4	3.7	4.0	3.3
26	.....	.....	.....	.....	.....	6.9	4.0	10.5	6.3	3.2	4.1	3.7
27	.....	.....	.....	.....	.....	7.7	3.7	9.0	4.3	2.9	4.8	5.3
28	.....	.....	.....	.....	.....	8.7	3.2	7.7	4.1	2.7	4.4	6.3
29	.....	.....	.....	.....	.....	10.2	2.5	6.7	3.9	2.5	4.2	6.6
30	.....	.....	.....	.....	.....	9.3	2.5	5.5	3.6	2.3	4.1	6.7
31	.....	.....	.....	.....	.....	.....	2.2	4.8	.....	2.2	.....	6.3
1904												
1	6.4	6.7	8.2	4.4	1.4	.9	.5	1.1	3.3	1.1	.3	1.6
2	6.6	6.4	7.8	4.8	1.4	1.6	.5	1.0	6.4	1.0	.3	1.4
3	.....	6.0	7.3	4.1	1.3	1.8	.5	2.2	6.5	1.0	.7	1.6
4	6.1	5.6	7.0	3.8	1.3	1.5	.6	4.6	6.0	.9	1.05	1.8
5	6.0	5.3	7.1	3.5	1.3	1.2	1.0	6.2	5.2	.8	1.5	2.1
6	5.4	5.0	7.1	3.3	1.1	1.1	1.2	8.4	4.3	.8	1.5	2.8
7	4.8	4.8	7.1	3.0	1.1	1.0	1.1	9.0	4.8	.7	1.5	3.1
8	4.6	5.0	7.4	2.9	1.0	.9	1.0	9.8	5.6	.6	1.3	3.1
9	4.8	5.1	7.8	2.8	1.0	.7	.8	9.0	5.6	.7	1.0	3.0
10	.....	6.0	8.0	3.8	1.0	.7	1.1	8.4	5.5	.7	.9	2.8
11	.....	8.2	8.0	4.6	.9	.6	1.4	8.6	5.1	.7	.8	2.7
12	.....	12.1	7.8	4.8	.9	.6	1.0	9.0	5.0	.7	.7	2.5
13	.....	12.0	7.6	4.7	.8	.6	1.0	9.4	4.4	.6	1.0	2.5
14	.....	.....	7.5	4.4	.8	.5	.8	8.9	3.6	.6	1.5	2.4
15	.....	11.5	7.1	3.4	.7	.5	.6	8.6	3.1	.7	1.9	2.3
16	.....	11.2	6.9	3.1	.7	.5	.8	8.3	2.6	.6	2.0	2.2
17	2.6	11.0	6.6	2.8	.7	.5	.6	7.6	2.3	.6	1.8	2.2
18	2.4	10.7	6.2	2.3	.7	.4	.5	6.3	2.1	.5	1.5	2.2
19	2.4	10.1	5.9	2.1	.6	.4	.5	6.4	1.9	.5	1.3	2.1
20	2.3	9.4	5.7	2.0	.6	.5	.4	5.4	1.6	.4	1.2	2.1
21	2.3	9.3	5.3	1.9	.6	.4	.4	4.8	1.5	.4	1.1	2.0
22	2.9	9.8	5.1	1.8	.6	.9	.6	4.5	1.5	.4	1.0	2.0
23	3.1	10.1	4.9	1.8	.5	.8	2.3	3.9	2.1	.4	1.1	1.9
24	4.0	10.4	4.6	1.7	.5	.6	1.9	3.7	2.2	.4	1.6	1.9
25	4.8	10.2	4.7	1.6	.5	.6	1.7	3.9	1.9	.3	1.2	1.9
26	5.7	9.8	4.8	1.5	.5	.5	1.5	3.9	1.7	.3	2.7	1.8
27	6.4	9.3	4.6	1.4	.5	.5	1.5	3.9	1.5	.4	2.4	1.9
28	7.2	.....	4.8	1.4	.5	.5	1.4	5.4	1.3	.4	2.2	2.0
29	7.8	8.5	4.9	1.5	.9	.5	1.5	6.3	1.2	.3	3.8	2.4
30	7.1	.....	5.0	1.5	1.1	.5	1.5	9.2	1.2	.3	1.6	2.7
31	6.8	.....	4.6	.....	.8	.....	1.3	9.2	.....	.3	.....	2.7
1905												
1	2.8	3.6	9.7	6.2	5.3	1.9	1.0	2.5	1.7	.7	.7	.6
2	2.9	3.7	9.1	5.9	5.3	1.7	1.2	2.4	1.5	.8	.6	.6
3	2.7	3.5	8.7	5.4	5.2	1.5	1.3	2.1	1.3	1.0	.6	.9
4	2.5	3.4	8.2	5.2	5.1	1.4	1.3	2.0	1.4	.9	.5	1.0
5	2.4	3.5	7.9	5.1	5.3	1.4	1.2	1.7	1.7	.8	.4	1.9
6	2.3	3.7	7.5	5.3	5.2	1.4	3.4	1.0	2.0	.7	.4	2.6
7	2.4	4.2	7.2	5.6	4.8	1.3	5.1	1.1	1.7	.6	.4	2.6
8	2.7	4.5	7.0	5.4	4.0	1.1	5.8	1.0	1.4	.6	.4	2.2
9	3.0	5.0	6.8	5.0	3.7	1.0	6.0	1.0	1.1	.5	.4	1.8
10	3.3	5.7	7.1	4.9	3.5	1.0	6.3	1.0	.9	.5	.4	1.9
11	3.3	5.9	7.4	5.2	3.2	.9	5.9	1.4	.8	.5	.4	2.0
12	3.5	6.8	8.9	5.5	2.9	.9	5.8	1.8	.8	.5	.4	2.1
13	3.9	8.6	10.5	6.1	2.7	.8	5.2	2.0	.7	.4	1.5	2.1
14	4.8	10.2	11.3	6.7	2.4	1.8	4.5	2.8	.7	.4	1.8	1.8
15	5.0	12.7	11.7	7.6	2.1	1.4	3.7	3.7	.9	.4	1.6	1.9

Daily gage height, in feet, of Ohoopee River near Reidsville—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
16	5.2	15.9	11.9	7.9	1.9	1.8	4.8	3.7	1.4	0.4	1.2	2.3
17	5.5	19.0	11.9	8.2	1.9	1.3	5.0	3.5	1.3	.4	1.1	2.3
18	5.5	15.0	11.6	7.3	2.3	1.4	4.7	3.3	1.5	.4	.9	3.2
19	5.1	14.6	11.3	7.2	2.7	1.4	5.0	3.3	1.3	.4	.9	3.3
20	4.9	13.7	11.1	7.2	2.8	1.5	5.7	3.1	1.0	.4	.8	3.0
21	4.7	11.8	10.4	6.5	2.7	1.3	4.7	3.0	.9	.4	.8	3.3
22	4.6	11.6	9.6	6.1	2.6	1.3	3.8	2.7	.8	.4	.7	4.1
23	4.5	12.0	9.0	6.8	2.4	1.3	3.0	2.5	.8	.4	.6	5.6
24	4.3	12.5	8.5	7.0	2.6	1.3	2.6	2.5	.6	.3	.6	6.8
25	4.2	12.2	8.3	7.2	3.0	1.2	2.1	2.1	.5	.3	.6	8.0
26	4.2	11.7	8.0	6.9	3.2	1.0	1.8	2.1	.5	.3	.6	7.9
27	4.1	11.1	7.9	6.2	3.2	1.2	1.7	2.8	.5	.4	.6	7.9
28	4.0	10.5	7.8	5.9	2.8	1.2	2.3	3.1	.5	.4	.6	7.6
29	3.8	.....	7.4	5.6	2.2	1.0	2.9	2.9	.5	.7	.6	7.5
30	3.6	.....	7.1	5.4	2.0	1.0	2.7	2.5	.6	.9	.6	7.8
31	3.6	.....	6.7	.....	2.0	.....	2.6	2.1	.....	.8	.....	8.2
1906												
1	8.8	8.7	6.2	6.3	1.1	3.5	4.6	8.6	8.1	3.2	1.2	1.0
2	8.8	8.3	6.0	6.1	1.0	2.8	3.7	8.4	7.2	3.4	1.2	.9
3	8.7	7.9	6.1	5.8	1.0	3.9	3.5	7.6	7.8	4.8	1.0	.9
4	8.9	7.5	7.9	5.5	1.0	5.0	3.5	7.3	7.0	5.2	.9	.8
5	9.0	7.2	8.1	5.1	1.0	7.6	4.7	7.4	6.3	6.5	.9	.8
6	9.1	6.9	7.6	4.7	1.4	9.9	5.0	7.5	5.1	5.0	.9	.7
7	9.3	6.5	7.5	4.4	1.9	9.5	5.1	6.8	4.9	4.7	.8	.7
8	9.6	6.5	7.7	4.1	2.9	8.9	5.8	5.9	4.3	4.3	.8	.9
9	9.2	7.2	8.1	3.7	3.5	7.8	6.0	4.3	3.8	4.0	.8	1.2
10	8.8	8.0	8.4	3.5	3.5	6.2	5.2	4.6	3.4	3.9	.8	1.7
11	8.3	8.5	8.2	3.3	3.3	4.4	4.2	4.0	2.9	3.7	.7	1.6
12	8.0	8.9	8.2	3.3	2.8	4.1	4.5	3.3	2.3	3.1	.7	1.4
13	7.7	9.2	8.0	3.0	2.0	6.0	4.2	3.6	2.9	2.7	.8	1.2
14	7.3	9.4	7.6	2.9	1.7	7.4	4.5	3.2	2.6	2.5	.8	1.0
15	7.1	9.5	7.1	3.0	1.5	8.4	4.9	2.9	3.7	2.3	.9	1.0
16	7.0	9.3	6.8	3.2	1.4	7.9	5.0	3.1	3.8	2.1	1.2	1.0
17	6.8	9.0	6.4	3.7	1.2	10.1	5.9	3.9	3.9	2.0	1.6	1.0
18	6.6	8.7	6.1	3.4	1.0	10.6	6.6	4.3	3.8	2.0	1.7	1.0
19	6.6	8.1	5.8	3.0	1.0	10.6	7.0	3.4	3.6	2.1	1.8	1.2
20	6.6	7.6	6.9	2.8	.9	11.0	7.8	2.9	3.4	2.3	1.8	1.7
21	6.3	7.5	7.6	2.7	.9	10.9	9.2	2.3	3.9	2.4	1.9	2.0
22	6.1	8.1	8.0	2.4	.9	10.0	8.4	2.8	3.4	2.4	1.8	2.3
23	6.5	8.2	8.7	2.2	.9	9.2	7.6	3.1	3.2	2.3	1.7	2.3
24	7.0	8.0	9.0	2.0	1.3	8.1	7.3	4.1	3.1	2.3	1.6	2.3
25	7.5	7.6	8.6	1.8	2.5	7.2	7.3	4.8	2.9	2.1	1.6	2.3
26	8.0	7.2	7.7	1.7	3.5	6.5	7.5	5.2	2.7	2.0	1.6	2.3
27	8.5	6.8	7.2	1.5	4.0	5.9	7.2	6.7	3.1	1.9	1.5	2.0
28	9.0	6.5	6.8	1.4	4.5	5.5	6.9	8.1	3.4	1.8	1.2	2.0
29	9.4	.....	6.8	1.3	4.8	5.3	7.8	8.6	3.5	1.7	1.1	2.0
30	9.3	.....	6.7	1.2	5.1	5.2	8.6	9.1	3.3	1.6	1.0	2.1
31	9.0	.....	6.7	.....	4.4	.....	9.0	8.9	.....	1.6	.....	2.4

Rating tables for Ohoopee River near Reidsville.

JUNE 23, 1903, TO DECEMBER 31, 1905.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.00	280	3.30	595	5.20	1,220	7.80	2,325
2.10	296	3.40	625	5.40	1,295	8.00	2,415
2.20	314	3.50	655	5.60	1,375	8.50	2,665
2.30	326	3.60	685	5.80	1,455	9.00	2,915
2.40	350	3.70	715	6.00	1,535	9.50	3,175
2.50	375	3.80	745	6.20	1,615	10.00	3,465
2.60	400	3.90	775	6.40	1,695	10.50	3,775
2.70	426	4.00	805	6.60	1,785	11.00	4,130
2.80	453	4.20	870	6.80	1,875	12.00	4,935
2.90	480	4.40	940	7.00	1,695	13.00	5,860
3.00	508	4.60	1,010	7.20	2,055	14.00	6,860
3.10	536	4.80	1,080	7.40	2,145		
3.20	565	5.00	1,150	7.60	2,235		

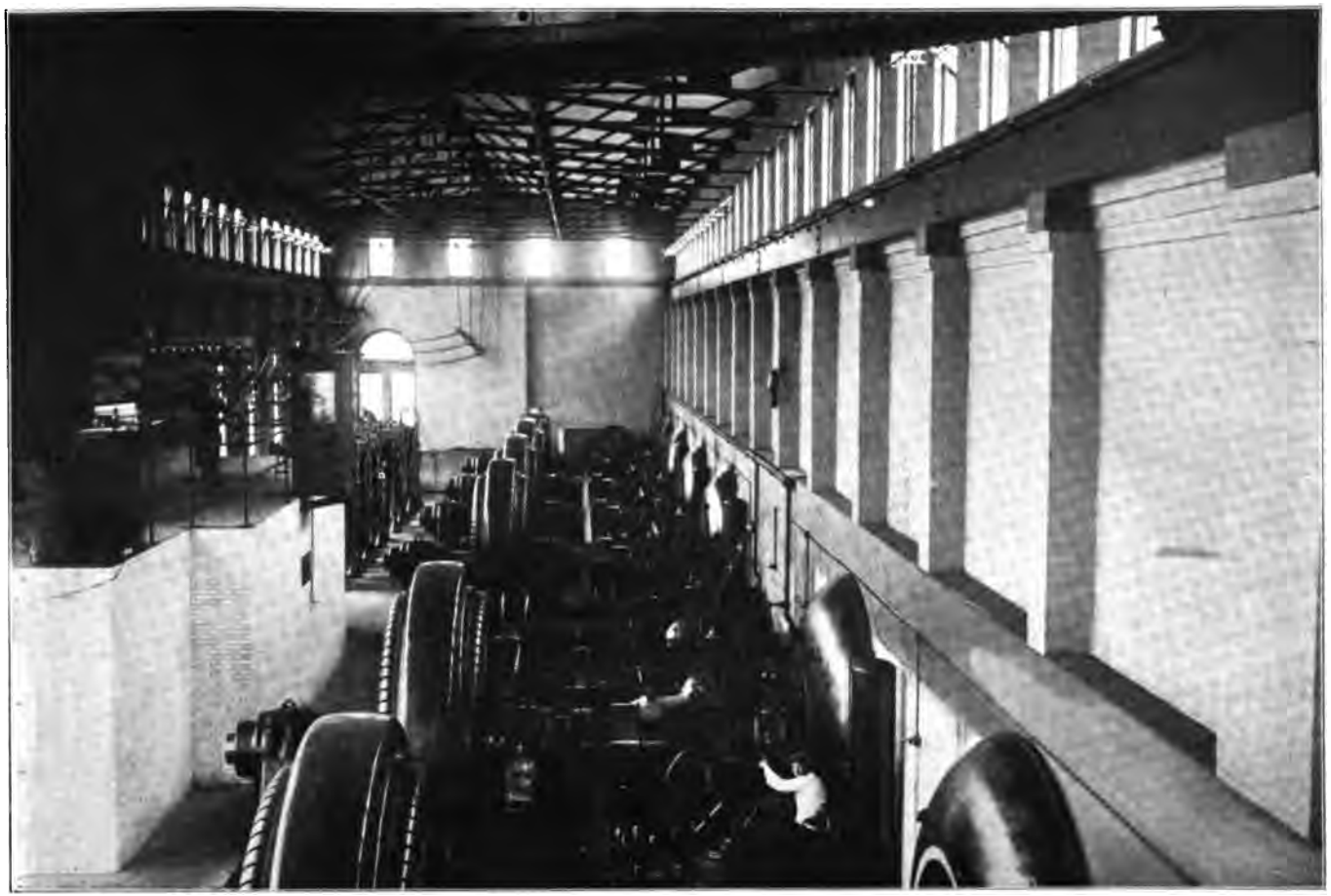
JANUARY 1, 1904, TO DECEMBER 31, 1905.

0.80	50	1.60	197	3.80	690	7.00	1,950
.40	57	1.70	213	4.00	755	7.50	2,184
.50	65	1.80	230	4.20	824	8.00	2,430
.60	74	1.90	247	4.40	895	8.50	2,685
.70	83	2.00	265	4.60	968	9.00	2,950
.80	93	2.20	302	4.80	1,043	9.50	3,222
.90	104	2.40	341	5.00	1,120	10.00	3,506
1.00	115	2.60	382	5.20	1,198	11.00	4,120
1.10	127	2.80	425	5.40	1,277	12.00	4,820
1.20	140	3.00	470	5.60	1,357	13.00	5,590
1.30	153	3.20	519	5.80	1,438		
1.40	167	3.40	572	6.00	1,520		
1.50	182	3.60	629	6.50	1,728		

JANUARY 1 TO DECEMBER 31, 1906.

0.70	83	2.10	288	3.50	600	5.80	1,438
.80	93	2.20	302	3.60	629	6.00	1,520
.90	104	2.30	321	3.70	659	6.20	1,602
1.00	115	2.40	341	3.80	690	6.40	1,685
1.10	127	2.50	361	3.90	722	6.60	1,771
1.20	140	2.60	382	4.00	755	6.80	1,860
1.30	153	2.70	403	4.20	821	7.00	1,950
1.40	167	2.80	425	4.40	895	8.00	2,430
1.50	182	2.90	447	4.60	968	9.00	2,950
1.60	197	3.00	470	4.80	1,043	10.00	3,500
1.70	213	3.10	494	5.00	1,120	11.00	4,120
1.80	230	3.20	519	5.20	1,198		
1.90	247	3.30	545	5.40	1,277		
2.00	265	3.40	572	5.60	1,357		

NOTE.—The above table is based on discharge measurements made during 1903–1906 and is well defined.



INTERIOR VIEW OF THE ATLANTA WATER AND ELECTRIC POWER COMPANY'S POWER HOUSE, NEAR ROSWELL, GEORGIA, SHOWING THE SEVEN 2,200 VOLT ELECTRIC GENERATORS.

Estimated monthly discharge of Ohoopee River near Reidsville.

[Drainage area, 1,280 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec-ft. per sq. mile	Depth in inches
1903					
June 24–30	3,585	1,740	2,455	1.92	0.500
July	3,840	314	1,872	1.46	1.68
August	6,860	280	2,344	1.83	2.11
September 1–12 and 20–30 *a*	3,960	326	1,252	.978	.837
October	1,920	280	654	.511	.589
November	1,415	350	966	.755	.842
December	1,830	480	775	.605	.698
1904					
January	2,330	321	1,062	.830	.957
February	4,894	1,043	2,877	2.25	2.43
March	2,531	968	1,708	1.33	1.53
April	1,043	167	495	.387	.432
May	167	65	101	.079	.091
June	230	57	91.8	.072	.080
July	321	57	125	.098	.113
August	3,388	115	1,811	1.41	1.63
September	2,582	140	747	.584	.652
October	127	50	74.0	.058	.067
November	403	50	170	.133	.148
December	494	167	316	.247	.285
The year	4,894	50	798	.623	8.42
1905					
January	1,317	321	744	.581	.670
February	10,390	572	3,512	2.74	2.85
March	4,746	1,815	2,989	2.34	2.70
April	2,531	1,081	1,625	1.27	1.42
May	1,237	247	588	.459	.529
June	247	93	154	.120	.134
July	1,643	115	750	.586	.676
August	659	115	349	.273	.315
September	265	65	126	.098	.109
October	115	50	69.4	.054	.062
November	230	57	89.9	.070	.078
December	2,531	74	860	.672	.775
The year	10,390	50	988	.772	10.32
1906					
January	3,280	1,560	2,470	1.93	2.22
February	3,220	1,730	2,420	1.89	1.97
March	2,950	1,440	2,140	1.67	1.92
April	1,640	140	619	.484	.54
May	1,160	104	359	.280	.32
June	4,120	425	2,210	1.73	1.93
July	3,060	600	1,600	1.25	1.44
August	3,000	321	1,370	1.07	1.23
September	2,480	321	858	.670	.75
October	1,730	197	520	.406	.47
November	247	83	146	.114	.13
December	341	83	189	.148	.17
The year	4,120	83	1,240	.970	13.09

a Missing dates, gage out.

NOTE.—Values are rated as follows: January to April and June to October, excellent; May, November, and December, good.

MISCELLANEOUS MEASUREMENTS IN ALTAMAHA RIVER DRAINAGE BASIN.

Alcovy River.—The following measurement was made October 7, 1904, from the wagon bridge at Henderson's mill, 4 miles from Newton Factory, on the road to Covington. The bench mark is the upstream edge of the bridge floor, 90 feet from the initial point for soundings, 11.00 feet above the datum of the gage.

Width, 40 feet; area, 43 square feet; mean velocity, 1.46 feet per second; gage height, 1.25 feet; discharge, 62 second-feet.

Beaverdam Creek.—This stream enters Oconee River from the left. The following measurement was made March 19, 1904, at Veazey Ford, 6 miles south of Greensboro, on the road to Sparta. The bench mark is a nail in a small ash tree on the left bank, 20 feet below the foot plank, 3.00 feet above the datum of the gage.

Width, 15 feet; area, 10 square feet; mean velocity, 1.70 feet per second; gage height, 1.50 feet; discharge, 17 feet.

Brazzell Creek.—The following measurement was made by wading at a narrow channel one fourth mile above the mouth and one-half mile from the regular gaging station on Ohoopee River at Reidsville. The gage height at the Ohoopee River station at the same time was 2.35 feet.

July 28, 1905. Width, 12 feet; area, 6.6 square feet; mean velocity, 0.85 foot per second; discharge, 5.6 second-feet.

Glady Creek.—At the wagon bridge, 3½ miles from Eatonton, this stream was discharging 7 second-feet on December 17, 1903, when the water surface was 6.14 feet below bridge floor 60 feet from right end of bridge going upstream.

Horse Creek.—This stream is a tributary of Ocmulgee River from the left. The measurement below was made September 8, 1904, 1½ miles above the mouth of the creek, 10 miles north of Lumber City. The bench mark is a nail driven into the end of the second floor beam above the second bent from the left bank, 15.00 feet above the zero of the gage.

Width, 55 feet; area, 115 square feet; mean velocity, 1.03 feet per second; gage height, 3.17 feet; discharge, 118 second-feet.

Indian Creek.—This stream was measured at wagon bridge at Hudson's mill, 6 miles northwest of Eatonton. The bench mark

is at top of bridge floor, 27½ feet from end of hand rail, right bank, upstream.

October 18, 1903: Height of bench mark above water, 8.79 feet; discharge, 85 second-feet.

December 17, 1903: Height of bench mark above water, 9.10 feet; discharge, 49 second-feet.

Jacks Creek.—A measurement was made from a foot log on the river road about one-fourth mile above Hayden's bridge, about one-half mile from Annistown. The bench mark is the head of a large wire nail driven into the downstream face of a double-trunk birch tree on the right bank, 20 feet below the road; elevation, 5.00 feet above the datum of the assumed gage.

January 28, 1905: Width, 8.5 feet; area, 3.7 square feet; mean velocity, 1.32 feet per second; gage height, 1.88 feet; discharge, 4.9 second-feet.

Little Ocmulgee River.—A measurement was made July 26, 1905, by wading about 90 feet upstream from the wagon bridge on which a bench mark was established in September, 1904, three-fourths mile northeast of Lumber City, Ga. The bench mark is the top of the downstream end of the cap of the second bent from the right bank; elevation, 23.00 feet above the datum of the assumed gage.

Width, 48 feet; area, 25 square feet; mean velocity, 1.64 feet per second; gage height, 1.46 feet; discharge, 41 second-feet.

This stream was measured also at a wooden wagon bridge 2½ miles from Lumber City and one-eighth mile from Wilcox Station, Ga. The bench mark is the center of a lag screw driven into the end of the second floor beam from the right bank of the downstream side; elevation, 18.00 feet above the datum of the assumed gage.

September 7, 1904: Width, 100 feet; area, 488 square feet; mean velocity, 1.92 feet per second; gage height, 3.15 feet; discharge, 9.37 second-feet.

July 25, 1905: Width, 52.5 feet; area, 61.5 square feet; mean velocity, 0.58 foot per second; gage height, 1.25 feet; discharge, 35.5 second-feet.

Little River.—This stream enters Oconee River from the right. It was measured at a wagon bridge 6¼ miles northwest of Eatonton. The bench mark is top of bridge floor, 20 feet from end of bridge, on left bank going upstream.

October 18, 1903: Height of bench mark above water, 8.73 feet; discharge, 118 second-feet.

December 17, 1903: Height of bench mark above water, 9.07 feet; discharge, 88 second-feet.

A measurement was made from the wagon bridge 9 miles north of Milledgeville, 1 mile above the mouth of the river. The initial point for soundings is the end of the hand rail at the left bank. The bench mark is a copper brand in the top of the downstream end of the cross beam at the first pier from the left bank; elevation, 15.00 feet above the datum of the assumed gage.

July 28, 1904: Width, 89 feet; area, 65 square feet; mean velocity, 1.09 feet per second; gage height, 3.17 feet; discharge, 71 second-feet.

September 15, 1905: Width, 99 feet; area, 92 square feet; mean velocity, 1.23 feet per second; gage height, 3.51 feet; discharge, 113 second-feet.

November 24, 1905: Width, 119 feet; area, 132 square feet; mean velocity, 1.55 feet per second; gage height, 3.86 feet; discharge, 205 second-feet.

Ocmulgee River.—This stream was measured at Holton. The bench mark is two nails in upstream side of birch tree 20 feet above old ferry landing, right bank.

October 14, 1903: Height of bench mark above water, 7.1 feet; discharge, 893 second-feet.

October 14, 1903: Height of bench mark above water, 7.0 feet; discharge, 963 second-feet.

At Bridges Ferry, near Berner, this stream was discharging 1,535 second-feet on June 16, 1903; gage height, 3.77 feet. The bench mark is a nail in birch tree at upper side of ferry landing, on right bank; elevation, 10.91 feet above datum.

Ohoopee River.—At Jarrell Bridge, near Ohoopee, this stream was discharging 1,481 second-feet on June 8, 1903, when the water surface was 7.1 feet below the top of crossbeam, 58 feet from end of hand rail, on right bank going downstream.

A measurement was made July 29, 1905, at Lynn Bridge, near Ohoopee. The initial point for soundings was the end of the hand rail at the left bank, downstream side. The bench mark was the top of the upstream end of the cap of the bent, 64 feet from the left end of the hand rail; elevation, 19.00 feet above the datum of the assumed gage.

Width, 84 feet; area, 314 square feet; mean velocity, 0.57 foot per second; gage height, 4.22 feet; discharge, 180 second-feet.

Pendleton Creek.—This stream was measured at Gordon Bridge, 3½ miles from Lyons. In 1903 the bench mark was a spike in a tupelo tree on right bank, 30 feet below bridge. This was carried away by a flood, and the 1905 measurement was dependent on a

new bench mark, the top of the downstream end of the cap of the third bent from the right-bank end of the bridge; elevation, 17.00 feet above the datum of the assumed gage.

June 8, 1903: Height of bench mark above water, 5.30 feet; discharge, 1,071 second-feet.

October 7, 1903: Height of bench mark above water, 11.60 feet: discharge, 100 second-feet.

October 7, 1903: Height of bench mark above water, 11.25 feet; discharge, 104 second-feet.

July 29, 1905: Width, 74 feet; area, 341 square feet; mean velocity, 1.23 feet per second; gage height, 7.58 feet; discharge, 438 second-feet.

Pole Bridge Creek.—This stream is a tributary of South River from the left near Lithonia. Measurements were made near the mouth of the creek, on the road between News Bridge and Parker Bridge.

July 16, 1904: Width, 15 feet; area, 7 square feet; mean velocity, 1.43 feet per second; discharge, 10 second-feet.

September 23, 1904: Width, 17 feet; area, 7 square feet; mean velocity, 1.00 foot per second; discharge, 7 second-feet.

Sanford Creek.—At wagon bridge, 3 miles from Eatonton, this stream was discharging 3.6 second-feet on December 17, 1903, when the water surface was 5.44 feet below bridge floor 21 feet from post on right bank.

Snapping Shoals Creek.—A measurement was made October 24, 1905, at a bridge about 80 feet above the mouth of Snapping Shoals Creek, 400 feet below the bridge on South River at Snapping Shoals. The bench mark is the top of the wooden stringer 13½ feet from the left-bank end; elevation, 12.00 feet above the datum of the assumed gage.

Width, 21 feet; area, 12 square feet; mean velocity, 1.17 feet per second; gage height, 0.54 foot; discharge, 14 second-feet.

South River.—A measurement was made on South River October 24, 1905, from a boat, just below the mouth of Snapping Shoals Creek, and about 500 feet below the wagon bridge at Snapping Shoals. The bench mark is the top of the downstream end of the first floor beam of the bridge to the left of the center pier; elevation, 26.00 feet above the datum of the assumed gage.

Width, 78 feet; area, 122 square feet; mean velocity, 1.18 feet per second; gage height, 3.00 feet; discharge, 144 second-feet.

A measurement was made October 7, 1904, at the wagon bridge,

10 miles from Jackson, on the road to Covington. The bench mark is the upstream end of floor beam, 66 feet from the initial point for soundings, 20.00 feet above the datum of the gage.

Width, 121 feet; area, 152 square feet; mean velocity, 0.90 foot per second; gage height, 1.10 feet; discharge, 137 second-feet.

Sugar Creek.—A measurement was made on this stream September 7, 1904, from the Southern Railway bridge, one-fourth mile north of Wilcox. The bench mark is the top of the steel girder, upstream side, 150 feet from the right end of the trestle, 25.00 feet above the datum of the gage.

Width, 41 feet; area, 117 square feet; mean velocity, 1.06 feet per second; gage height, 7.50 feet; discharge, 124 second-feet.

Another measurement was made July 25, 1905, at a new wagon bridge 75 feet upstream from the Southern Railway bridge at Wilcox. The bench mark is the top of the downstream wooden stringer 126 feet from the right end of the downstream hand rail of the bridge; elevation, 22.06 feet above the datum of the assumed gage.

Width, 15 feet; area, 18 square feet; mean velocity 0.30 foot per second; gage height, 3.88 feet; discharge, 5.5 second-feet.

Swift Creek.—Near Lyons, this stream was discharging 31 second-feet on October 7, 1903.

Town Creek.—At wagon bridge, 1 mile east of Eatonton, this stream was discharging 2.7 second-feet on December 18, 1903, when the water surface was 8.57 feet below top of bridge floor, 24 feet from right end of bridge, going downstream.

Yellow River.—At Woods Bridge, near Almon, this stream was discharging 79 second-feet on September 12, 1903, when the water surface was 17.46 feet below top of crossbeam, 75 feet from right end of bridge going downstream.

At a wagon bridge near Lithonia this stream was discharging 104 second-feet on October 5, 1903, when the water surface was 16.25 feet, below top of wooden stringer on downstream side of bridge, at inside face of right-bank stone abutment.

A measurement was made at this place September 15, 1905. The bench mark is the top of the downstream corner of the right-bank stone abutment; elevation, 16.55 feet above the datum of the assumed gage.

Width, 28 feet; area, 40 square feet; mean velocity, 1.70 feet per second; gage height, 1.96 feet; discharge, 68 second-feet.

A measurement was made October 7, 1904, at the wagon bridge 11 miles from Jackson, on the road to Covington. The bench mark is the downstream edge of the bridge floor, 40 feet from the initial point for soundings, and is 8.00 feet above the datum of the gage.

Width, 113 feet; area, 229 square feet; mean velocity, 0.30 foot per second; gage height, 1.80 feet; discharge, 69 second-feet.

RIVER SURVEYS IN ALTAMAHA RIVER DRAINAGE BASIN.

SOUTH RIVER.

The elevations in the following lists are based upon an aluminum tablet at the Washington street entrance of the State capitol building at Atlanta, marked "1050 M. C.," the elevation of which is accepted as 1,049.546 feet above mean sea level.

The leveling on South River is adjusted to accord with elevations of precise-level bench marks at Constitution, Holton, and Macon, by the 1903 adjustment. The leveling was done in 1903 for the United States Geological Survey by Joseph Palmer, levelman, under the direction of F. A. Franck, field assistant.

Elevations on South River from Constitution to mouth.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Iron post 4 feet east of signboard "Constitution," 25 feet south of railroad	847.006
1.0	60 feet below Southern Railway bridge, water surface	772
2.0	Black-gum tree opposite mouth of Intrenchment Creek	773.77
2.0	Water surface	770
2.8	Sycamore tree 35 feet south of creek, 50 feet east of road at McNeals Bridge	769.57
2.8	Water surface	768
3.9	Junction of South River and Sugar Creek, water surface	765
4.1	40 feet east of road at south approach, Surges Bridge	762
5.8	Mouth of small stream, water surface	754
6.3	15 feet below road, north approach of bridge	752
7.0	Kellers Bridge, iron bolt on north end	751.92
7.0	Kellers Bridge, water surface	750
7.06	Blue Creek, 100 yards below Kellers Bridge, water surface	748
8.0	Mouth small creek, water surface	743
9.1	Water surface	739
10.0	Shoal Creek Bridge, water surface	737
10.05	Mouth of Shoal Creek, water surface	737
10.4	15 feet above Waldrops Bridge, water surface	736
11.0	At mouth small stream, one-fourth mile below Waldrops Bridge, water surface	732
11.8	Fork Creek, 5 feet below bridge, water surface	730.8
12.0	Water surface	730
12.3	Lower end of island, water surface	729
12.6	Birch tree at small stream	733.2f
12.6	Water surface	728

Elevations on South River from Constitution to mouth—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
13.5	Flake's mill, top of dam	726
13.6	Flake's mill, bottom of dam	720
13.6	In rapids below dam, water surface	719
14.0	Water surface	714
14.2	Below rapids, water surface	713
14.3	Above riffs, water surface	713
14.32	Below riffs, water surface	711
14.8	Water surface	710
15.0	Opposite mouth Snapfinger Creek, water surface	710
15.3	Above shoals just below Snapfinger Creek, water surface	709.7
15.35	Below shoals just below Snapfinger Creek, water surface	708
15.8	At mouth of Mathews Creek, water surface	701
16.1	100 feet below mouth of Cucumber Creek, water surface	698
16.3	Flat Shoals Bridge, on stone masonry, south side of river, east side of approach	708.71
16.5	Flat Shoals Bridge, water surface	698
16.3	Below Flat Shoals, water surface	686
18.0	Mouth of small stream, water surface	683
18.6	50 feet above small stream opposite Little Mountain, water surface	683
19.0	Water surface	682
19.9	At bend of river just below Little Mountain, water surface	681
20.6	Parkers Bridge on sweet-gum tree south side of river, 50 feet from bridge, 6 feet from road	678.76
20.6	Parkers Bridge, water surface	672
20.7	Opposite Pole Bridge Creek, water surface	670
22.0	50 feet below Albert Shoals Bridge, water surface	669.50
22.05	Mouth small stream, head of Albert Shoals, water surface	667
22.6	At old mill, water surface	660
22.6	Below falls, water surface	653
23.2	Opposite mouth of Crooked Creek, water surface	651
23.6	Daniels Bridge, top stone pier, lower side, right end	667.97
23.6	Daniels Bridge, water surface	649
23.7	Head of shoals below Daniels Bridge, water surface	647
23.75	Foot of shoals below Daniels Bridge, water surface	645
24.0	Mouth of small creek from right bank, water surface	644
24.5	25 feet below mouth of creek, right bank, water surface	643
24.8	Head of Pucket Shoals, water surface	642
.....	Foot of Pucket Shoals, water surface	639
24.9	Foot of lower Pucket Shoals, water surface	637
25.3	Head of shoals, Simms Bridge, water surface	636
.....	Foot of shoals, Simms Bridge, water surface	634
25.7	Opposite mouth of small creek, water surface	631
26.4	Sycamore tree, 50 feet above mouth of Knights Creek	639.28
26.4	Water surface	629
27.0	40 feet below creek, 1 mile below Knights Creek, water surface	626
27.2	At mouth of small creek, about 1¼ miles below Knights Creek, water surface	625
28.9	Water surface	621
29.2	Forty feet above mouth of small stream, water surface	620
30.0	Mouth of small stream, right bank, water surface	619
30.5	About one-half mile below small stream, water surface	618
30.8	Opposite mouth of Honey Creek, water surface	616
31.0	On oak tree, 25 feet above Oglesbys Bridge	622.02
31.0	Water surface	614
31.2	Mouth of Camp Creek, water surface	613
31.4	Mouth of small creek, about one-fourth mile below Oglesbys Bridge, water surface	612.2
33.0	Sixty feet above small stream, about 1 mile below Oglesbys Bridge, water surface	610
33.1	Mouth of small stream, water surface	610
33.9	Mouth of creek about 2 miles below Oglesbys Bridge, water surface	606
34.5	40 feet below mouth of small creek, water surface	604
35.0	Head of shoals (one-half mile) water surface	602
.....	Foot of shoals, water surface	601
35.5	Opposite bend in river	597
36.0	Peachstone Shoals Bridge, water oak	605.71
36.0	Peachstone Shoals Bridge, water surface	597
.....	Peachstone Shoals, head of dam	597
.....	Peachstone Shoals, foot of dam	595
36.1	Peachstone Shoals, foot of rapids	589
36.4	Water surface	588
38.0	Opposite mouth of Cotton River, water surface	587
38.4	Mouth of small stream, water surface	584
39.0	Mouth of small stream below sharp bend in river, water surface	580
39.6	Mouth of small creek, water surface	578
40.0	Mouth of small stream, water surface	576
40.1	Mouth of Walnut Creek, water surface	573
41.0	Red oak 30 feet below Butlers Bridge	587.15
41.0	Butlers Bridge, water surface	569

Elevations on South River from Constitution to mouth—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
41.25	Mouth of small creek, water surface	568.5
41.7	....do	568
42.0	Water surface	566
43.0	Head of upper Snapping Shoals, water surface	562
43.02	Foot of upper Snapping Shoals, water surface	561
43.03	Head of Snapping Shoals, water surface	561
43.05	Foot of first falls, water surface	557
43.06	Head of second falls, 180 feet from first fall, water surface	556
43.1	Water oak 40 feet from north approach of Snapping Shoals Bridge	559.66
43.1	Water surface	542
43.2	Foot of rapids, water surface	541
43.8	60 feet above small stream, water surface	538
45.0	Island Shoals, at head of dam, water surface	536
.....	Island Shoals, at foot of dam, water surface	534
.....	Island Shoals at head, water surface	534
45.25	Island Shoals at foot, water surface	526
45.3	Island Shoals Bridge, white oak at south approach	534.89
45.3	Island Shoals Bridge, water surface	525
47.0	Mouth of creek, water surface	519
47.8	Water surface	518
49.0	Head of small shoals, water surface	512
49.4	Opposite shoals, water surface	511
50.0	Head of shoals one-fourth mile above Manns Bridge, water surface	509
.....	Foot of shoals, water surface	507
50.8	On hickory tree 20 feet below Manns Bridge	518.49
50.8	Water surface	503
51.0	At small Creek, water surface	501
51.5	About three-fourths of a mile below Manns Bridge, water surface	500

SURVEY OF OCMULGEE RIVER.

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Elevations on Ocmulgee River from junction of South and Yellow rivers to Macon.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
52.1	Large pine tree opposite mouth of Yellow River	506.94
52.1	Head of shoals	498
53.5	Near end of island, water surface	487
54.0	Head of Lemon Shoals, water surface	486
54.02	Foot of Lemon Shoals, water surface	434
54.5	Large white oak opposite mouth of Alcovy River	494.27
54.5	Water surface	484
54.55	Head of shoals just below Alcovy River, water surface	483
54.56	Foot of shoals just below Alcovy River, water surface	482
54.6	Head of dam in left channel and also head of shoals in right channel at Kees Shoals, water surface	481
54.7	Foot of dam, water surface	479
54.75	Foot of shoals, water surface	477
56.0	Head of shoals one-fourth mile below Kees mill, water surface	475
56.0	Foot of shoals one-fourth mile below Kees mill, water surface	473
56.2	Water oak at mouth of Tussahaw Creek	482.12
56.2	Water surface	472
56.5	Dempseys Ferry and head of Cooks Shoals, water surface	472
56.6	Foot of Cooks Shoals, water surface	468
56.9	Head of Lloyds Shoals, water surface	465
57.2	End of small island, water surface	457
58.1	Opposite lower end of last island in shoals, water surface	445
58.8	Shoals, water surface	437
58.5	Foot of Lloyds Shoals, water surface	429
59.5	Pittmans Ferry, large beech tree	434.96
59.5	Pittmans Ferry, water surface	425
59.55	Head of shoals just below Pittmans Ferry	425
59.6	Foot of shoals, water surface	423
60.0	Hickory tree 30 feet above mouth of Yellow Water Creek	433.97
60.0	Water surface	422
61.3	Giles Ferry, large pine tree	430.01
61.3	Giles Ferry, water surface	420
61.35	Smiths Shoals, head of dam, water surface	420
61.35	Smith Shoals, foot of dam, water surface	418
61.9	Smiths Shoals, near lower end small island, water surface	417
62.8	Foot of Smith Shoals, water surface	408
63.0	Smith's Ferry, ash tree 20 feet above landing	410.44
63.0	Smith's Ferry, water surface	407
64.0	Head of Lamars Shoals, water surface	406
64.5	Lamars Shoals, head of dam, water surface	403
64.5	Lamars Shoals, foot of dam, water surface	398
65.0	Foot of Lamars Shoals, water surface	387.5
65.6	Lamars Ferry, water surface	384
66.2	Goodmans Ferry, large red oak	400.74
66.2	Goodmans Ferry, water surface	382
67.0	Mouth of Little Sandy Creek, water surface	381
69.1	About one-half mile above Wards Ferry, water surface	377
69.9	Wards Ferry, water oak	392.69
69.9	Wards Ferry, water surface	375
71.5	White paint mark on stone pier 2 feet from end, 4 feet west of western rail Southern Railway bridge over Big Sandy Creek	399.45
71.5	Water surface	374
72.0	Mouth of Big Sandy Creek, water surface	373
74.6	Bridges Ferry, large water oak	382.82
74.6	Bridges Ferry, water surface	370
75.0	Large dead oak about 4 miles below Bridges Ferry	388.15
75.0	Water surface	368
76.5	Large red oak, south bank, Towaliga River	379.34
76.5	Water surface	368
77.5	Head of Glovers Shoals, water surface	366
77.8	Glovers Shoals, head of dam, water surface	362
77.9	Glovers Shoals, foot of dam water surface	355
78 0	Foot of Shoals at Juliette, water surface	351
79.4	Large beech tree 10 feet south of west approach Glovers Ferry	361.10
79.4	Water surface	346
80.6	Mitchells Ferry, red oak tree 10 feet south of west approach	361.74
80.6	Mitchells Ferry, water surface	344
81.6	Head of small shoals, water surface	343
81.6	Foot of small shoals, water surface	342
82.0	Head of small shoals, water surface	341
82.05	Foot of small shoals, water surface	339
82.5	About one-half mile below shoals water surface	337

Elevations on Ocmulgee River from junction of South and Yellow rivers to Macon—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
84.5	Thunderwood tree opposite post on Southern Railway, 1 mile above Dames Ferry, 25 feet from river bank	340.79
84.5	Water surface	330
86.0	Dames Ferry, ash tree 10 feet south of western approach	335.63
86.0	Dames Ferry, water surface	328
87.0	Carsterpher's mill, head of dam, water surface	328
87.0	Carsterpher's mill, foot of dam, water surface	322
87.1	Foot of shoals, water surface	320
88.5	North abutment of Southern Railway bridge, over Rum Creek	347.32
88.5	Water surface	318
89.0	Popes Station, in front of top of west rail	348.23
89.0	Popes Ferry, water oak	326.88
89.0	Popes Ferry, water surface	318
89.8	Head of shoals about 1 mile below Popes	317
90.0	Foot of shoals	312
90.1	Mouth of Tobler Creek	312
90.6	Above small shoals, water surface	311
90.64	Below small shoals, water surface	310
91.2	Above small shoals, water surface	309
91.2	Below small shoals, water surface	307
92.6	Above small shoals, water surface	306.
92.6	Below small shoals, water surface	304
93.6	Above shoals, water surface	302
93.0	Below shoals, water surface	300
94.0	Iron post marked "339. Morehead—1898" at Holton Station, Southern Railway, 35 feet north of station, 29 feet west of center of track	333.733
94.0	Water surface	299
95.0	Above shoals, about one-fourth mile above Beaverdam Creek, water surface	296
95.8	Foot of shoals, water surface	294
96.0	Head of shoals just above creek, water surface	294
96.0	Foot of shoals just above creek, water surface	291
96.8	Mouth of Beaverdam Creek, water surface	291
96.85	Head of shoals just below Beaverdam Creek, water surface	290
96.9	Foot of shoals just below Beaverdam Creek, water surface	289
97.1	Head of shoals about one-fourth mile below Beaverdam Creek, water surface	289
97.2	Foot of shoals, water surface	284
99.8	Virgin, point on west rail at upper switch	322.52
99.8	Virgin, water surface	282
100.3	About one-half mile below Virgin, water surface	281
102.0	Pine tree 100 feet below mouth of small creek just below Macon waterworks, and 30 feet east of right-hand track	301.88
102.0	Water surface	278
106.5	At Fifth Street Bridge, Macon, Ga	276
107.0	Check on tablet at P. O. corner Third and Mulberry streets, Macon	333.942

SURVEY OF YELLOW RIVER.

The elevations in the following lists are based upon an aluminum tablet at the Washington street entrance of the State capitol building at Atlanta, marked "1050 M. C.," the elevation of which is accepted as 1,049.546 feet above mean sea level. The initial point is a bench mark of flying levels on Ocmulgee River.

The leveling was done in 1903 for the United States Geological Survey by Joseph Palmer, levelman, under the direction of F. A. Franck, field assistant.

Elevations on Yellow River from mouth to Yellow River.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Pine opposite mouth of Yellow River	506.94
0.0	Water surface	500
0.5	Ash, 10 feet from bank, opposite Indian Fishery Shoals	517.24
.....	Foot of Indian Fishery Shoals, water surface	504
.....	Head of Indian Fishery Shoals, water surface	516
1.1	Mouth of small stream, water surface	516.6
2.5	Allens Bridge, maple 20 feet from stream on east bank	528.49
2.5	Allens Bridge, water surface	517
.....	Foot of Allens Shoals, water surface	517
.....	Head of Allens Shoals, water surface	519
3.3	Mouth of stream coming in from east, about 3 miles above Allens Shoals, water surface	520
4.7	Ash tree, west bank river, Lees Shoals	528.49
4.7	Foot of Lees Shoals, water surface	520
.....	Head of Lees Shoals, water surface	523
6.2	Picketts Bridge, white oak, east bank	539.23
6.2	Picketts Bridge, water surface	526
6.5	Water surface	527
7.5	100 feet below small stream, water surface	528
9.0	Mouth of small stream, water surface	529
10.7	Flat Shoals Bridge, white oak, west bank river	551.24
10.7	Flat Shoals Bridge, water surface	534
13.1	Small creek from west, water surface	537
13.8	White oak, foot of Langston Shoals, 15 feet from stream, west bank	549.69
13.8	Water surface	539
.....	Head of Langsdon Shoals, water surface	543
15.2	Near mouth of small stream, water surface	544
16.0	Below shoals, water surface	545
.....	Above shoals, water surface	547
16.9	Porterdale Shoals, white oak 10 feet from stream, west bank, 60 feet from foot of shoals	561.05
16.9	Porterdale Shoals, water surface	549
.....	Porterdale, foot of dam, water surface	604
.....	Porterdale, head of dam, water surface	616
17.7	Porterdale Bridge, white oak 20 feet from south approach	618.38
17.7	Porterdale Bridge, water surface	616
17.7	Porterdale, rod held on top steel post of railing at extreme south end of steel bridge	627.81
18.7	River at sharp bend, water surface	616
20.8	Sweet gum 10 feet from stream, 60 feet above Browns Bridge	622.81
20.8	Water surface	616
.....	Three-fourths mile above Browns Bridge, water surface	616
21.5	About 1 mile above Browns Bridge, water surface	616
22.0	At mouth of Hurricane Creek, one-half mile below Woods Bridge, water surface	616
22.8	Woods Bridge, poplar tree	627.49
22.8	Woods Bridge, water surface	617
23.0	Chisel mark on large rock under Georgia Railroad bridge, west bank	642.05
23.0	Water surface	617
23.0	Foot of small shoal under Georgia Railroad bridge, water surface	617
23.2	About one-sixth mile above railroad bridge, water surface	619
23.7	Small creek, west bank, water surface	619.2
24.8	Hardwick Bridge, water oak on north bank	639.11
24.8	Hardwick Bridge, water surface	620.3
24.8	About one-half mile above bridge, water surface	620.7
25.0	Water surface	620.8
26.0	Water oak, opposite mouth of Haynes Creek	632.26
26.0	Water surface	624.6
27.1	Water surface	629
28.2	McDaniels Bridge, large water oak on west bank	644.17
28.2	McDaniels Bridge, water surface	632
.....	Foot of dam, McDaniels Mill, water surface	632
.....	Head of dam, McDaniels Mill, water surface	641
29.0	Bank, opposite small islands	641
30.5	Large white-oak 10 feet below Pinelog Bridge	650.55
30.5	Water surface	641
31.1	About one-half mile above bridge, water surface	641
32.2	Tall pine, left bank, 100 yards above Boartusk Creek	653.96
32.2	Water surface	644
32.6	Three-tenths mile below Milstead, water surface	645
32.8	Pine at foot of shoals at Milstead	657.41
32.8	Water surface	647
.....	In shoals, water surface	657
.....	In shoals, water surface	667
33.0	Foot of dam, water surface	677
33.0	Top of dam, water surface	692

Elevations on Yellow River from mouth to Yellow River—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
33.0	Milstead, large white-oak 40 feet above bridge between main and side tracks south bank	701.33
33.0	Milstead, water surface	692
35.4	Ervins Bridge, hickory on west bank, 20 feet above bridge	697.33
35.4	Ervins Bridge, water surface	697
36.5	Water-oak, east bank, about 1 mile above bridge	700.62
36.3	Water surface	694
38.0	Water surface	697
38.5	Water surface	696
39.4	Johnstons Bridge, on top of iron bolt, extreme end of bridge, eastern entrance	717.53
39.4	Johnstons Bridge, water surface	702
40.2	About 0.6 mile above bridge, water surface	705
40.3	Water surface	707
40.8	Below small shoals, water surface	709
40.9	Above small shoals, water surface	711
40.9	White paint mark on stone masonry to old dam, west bank	722.88
40.9	Water surface	711
40.9	Head of old dam, water surface	712
41.3	Foot of small shoals, water surface	714
.....	Head of small shoals, water surface	715
41.9	White oak, 20 feet from stream, opposite small shoals, east bank	730.91
41.9	Water surface	715
.....	Head of shoals, water surface	717.6
42.4	White oak, opposite mouth of Mountain Creek	727.91
42.4	Foot of shoals, water surface	718
.....	Head of shoals, water surface	720
42.8	Head of shoals, water surface	723
43.2	Rock Bridge, white paint mark on top of stone pier	740.60
43.2	Rock Bridge, water surface	724
43.7	Water surface	726
44.0	Ash tree, 10 feet from stream, west bank	728.48
44.0	Water surface	727
45.5	Hickory tree, opposite foot of shoals	748.83
45.5	Water surface	729
.....	Head of shoals, water surface	733
.....	Foot of shoals, opposite sand island below old Annistown, water surface	737
46.2	One-fourth mile below Haydens Bridge, water surface	738
46.6	In shoals, water surface	747
47.0	Annistown, foot of dam, water surface	760
.....	Annistown, head of dam, water surface	771
47.2	Haydens Bridge, large birch on east bank	777.64
47.5	20 yards above creek, water surface	771
48.6	Chisel mark on large rock, opposite old mill, east bank	788.55
48.6	Water surface	722
48.9	Head of shoals, water surface	786
49.1	About one-half mile above shoals, water surface	787
50.5	Sextons Bridge, on top iron bolt, stone pier	809.94
50.5	Water surface	791
51.7	Large pine, opposite shoals	806.42
51.7	Water surface	793
51.7	Foot of shoals, water surface	797
.....	Head of shoals, water surface	802
53.0	Hickory tree at head of shoals	818.17
53.0	Water surface	804
54.0	Water surface	807
55.0	Yellow River Bridge, white oak	825.41
55.0	Yellow River Bridge, water surface	815
55.2	Head of shoals, water surface	818
55.7	Large water oak, about 100 yards above Simmons mill, east bank	834.86
57.3	Simmons Mill, below dam, water surface	819
.....	Simmons Mill, head of dam, water surface	826

SURVEY OF ALCOVY RIVER.

The elevations in the following lists are based upon an aluminum tablet at the Washington street entrance of the State capitol building at Atlanta, marked "1050 M. C.," the elevation of which is accepted

as 1,049.546 feet above mean sea level. The initial point is a bench mark of flying levels on Ocmulgee River.

The leveling was done in 1903 for the United States Geological Survey by Joseph Palmer, levelman, under the direction of F. A. Franck, field assistant.

Elevations on Alcovy River from mouth to Dabneys Bridge.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	White oak, west bank of Ocmulgee River, and opposite mouth of Alcovy River	494.27
0.0	Water surface	484
1.0	Ash, right bank, upstream	498.73
1.0	Water surface	487
2.0	Ash, east bank, upstream	498.40
2.0	Water surface	492
3.9	Waters Bridge, right bank, spike in northeast corner	506.55
3.9	Waters Bridge, water surface	498
4.9	Ash on west bank	505.37
4.9	Water surface	497
5.9	Birch on left bank	505.51
5.9	Water surface	500
6.3	Foot of Mackey Shoals, ash, left bank opposite shoals	512.77
6.3	Water surface	502
6.4	Head of Mackeys Shoals, water surface	504
8.2	Birch opposite Mackeys Second Shoals at foot of left bank, upstream, nail in root of birch tree	518.5
8.2	Water surface	505
8.4	Head of Mackeys Second Shoals, water surface	508
9.0	Foot of Newton Factory Shoals water surface	509
9.2	Newton Factory Shoals, black gum opposite dam at White's mill	562.86
9.2	White's mill, foot of dam, water surface	553
9.2	White's mill, head of dam, water surface	558
9.8	Lower side Newton Factory Bridge, top of bolt marked with white paint	592.81
9.8	Water surface	582
10.0	Head of Newton Factory Shoals, water surface	592
10.8	Red-oak tree about 1 mile above bridge	619.86
10.8	Water surface	598
11.5	Foot of shoals, water surface	594
11.55	Head of shoals, water surface	596
12.3	Water oak, left bank	604.50
12.3	Water surface	597
13.0	Beech tree opposite shoals	604.88
13.0	Water surface	598
.....	Head of shoals, water surface	600
13.3	Sweet-gum tree, east bank of river	612.85
14.0	One mile below Henderson's mill, water-oak, left bank	620.76
14.0	Water surface	602
15.0	Henderson's mill, post oak at bridge, right bank	618.99
15.0	Water surface	604
15.0	Henderson's mill, foot of dam, water surface	607
15.0	Henderson's mill, head of dam, water surface	613
18.3	Dabneys Bridge, water oak, west bank	627.22
18.3	Dabneys Bridge, water surface	615

SURVEY OF TOWALIGA RIVER.

The elevations in the following lists are based upon an aluminum tablet at the Washington street entrance of the State capitol building at Atlanta, marked "1050 M. C.," the elevation of which is accepted as 1,049.546 feet above mean sea level. The initial point is a bench mark of flying levels on Ocmulgee River.

The leveling was done in 1903 for the United States Geological

Survey by Joseph Palmer, levelman, under the direction of F. A. Franck, field assistant.

Elevations on Towaliga River from mouth to High Falls Bridge.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Water oak, south side at mouth of river	379.34
0.0	Water surface	367
1.7	On root of beech tree, east bank, 50 feet from stream at Lamars Bridge	382
1.7	Water surface	371
2.2	Ash tree one-half mile above Lamars Bridge at mouth of small creek	377.36
2.2	Water surface	373
3.7	Water surface	376
4.0	Large pine tree 50 feet from river, west bank	412.45
4.0	Water surface	379
4.6	Water surface	382
6.0	Hunting Shoals Bridge, top of iron bolt on stone pier	412.80
6.0	Hunting Shoals Bridge, water surface	386
7.0	Twin water oak 10 feet from stream, north bank going up	399.49
7.0	Water surface	393
8.8	Jacksons Bridge, poplar tree, west bank	409.84
8.8	Jacksons Bridge, water surface	395
9.5	Water surface	397
10.5	Pine, 100 yards above creek, west bank, 10 feet from river	416.15
10.5	Water surface	400
11.8	Water oak, 10 feet below Wilsons Bridge	421.06
11.8	Water surface	406
12.3	Water oak about one-half mile above Wilsons Bridge, west bank	431.01
12.3	Water surface	410
13.3	North Fork, birch tree about 100 yards above junction of North and South forks	416.98
13.3	Water surface	414
14.0	Foot of shoals, water surface	418
.....	Head of shoals, water surface	421
15.0	Foot of shoals, water surface	422
.....	Head of shoals, water surface	428
15.0	Birch tree, north bank, opposite shoals	432.23
15.5	Foot of shoals, water surface	429
15.6	Head of shoals, water surface	434
16.0	Morans Bridge, right bank, white oak 20 feet below bridge	443.61
.....	Morans Bridge, foot of shoals, water surface	437
16.1	Morans Bridge, head of shoals, water surface	439
17.4	Willow opposite shoals	449.74
17.4	Water surface	443
17.5	Foot of shoals, water surface	446
.....	Head of shoals, water surface	450
18.0	Pine at mouth of Tobes Creek	457.48
18.0	Water surface	452
18.5	Foot of shoals, water surface	452
.....	Head of shoals, water surface	454
18.7	Foot of small shoals, water surface	455
.....	Head of small shoals, water surface	457
19.2	Birch tree, south bank, 20 feet above small stream	462.60
21.1	Foot of Long Shoals, white oak	474.31
21.1	Water surface	466
21.2	Foot of High Falls, water surface	492
21.3	High Falls Bridge, north approach, top of iron bolt, west side	563.32
21.3	Water surface	524
21.7	Head of Long Shoals, opposite old dam, water surface	561

SURVEY OF OCONEE AND MIDDLE OCONEE RIVERS.

The survey of Oconee River from Milledgeville to mouth of Apalachee River was made in 1885 by C. A. Locke, assistant engineer, U. S. Army. The survey of Oconee River above mouth of Apalachee River and of Middle Oconee River was made in July and August, 1902, by J. B. High, under the direction of B. M. Hall, of the United States Geological Survey.

Elevations on Oconee and Middle Oconee rivers above Milledgeville.

OCONEE RIVER.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0	Below Treanor's milldam at Milledgeville, water surface	215.5
0	Above Treanor's milldam, water surface	222
3.7	Foot of Furman's Shoals, water surface	224.5
4.5	Oconee Electric Power Company's dam site, water surface	239.5
7.5	Fraleys Ferry, water surface	254
8.0	Below Fraleys Mill Shoal, water surface	256
8.4	Above Fraleys Mill Shoal, water surface	263
10.8	Mouth of Little River, water surface	266
13.4	Rock Landing, water surface	275
14.1	Ferry, water surface	277
15.4	Mouth of Crooked Creek (right bank), water surface	282
17.2	Mouth of Rocky Creek (right bank), water surface	290.5
22.7	Putnam Mineral Springs (right bank), water surface	305
23.9	Mouth of Log Dam Creek (left bank), water surface	307.5
24.6	Warrens Old Ferry, water surface	309
26.5	Mouth of Shoulderbone Creek (left bank), water surface	310.5
27.9	Ferry, water surface	313.3
29.5	Foot of Shoal, water surface	322
30.6	Rope Ferry on Laurens Shoals, water surface	332
31.9	Below Laurens milldam (8-foot dam), water surface	345
31.9	Above Laurens milldam (8-foot dam), water surface	353
32.3	Mouth of Richland Creek (left bank), water surface	353
33.1	Top of Laurens Shoals, end of pond, water surface	353
33.6	Foot of Methodist Fishery or Riley Shoals, water surface	354
34.3	Top of Methodist Fishery or Rileys Shoals, water surface	384
35.0	Ferry and old piers, below Spivey's mill, water surface	396
35.8	Top of Long Shoals, water surface	399
38.2	Foot of Hills Shoals, water surface	403
38.6	Top of Hills Shoals, water surface	404
45.8	Mouth of Sugar Creek (right bank), water surface	411
50.5	Below Parks milldam, water surface	416
50.5	Above Parks milldam, water surface	426
54.0	Georgia Railroad Bridge, Carey, water surface	426
54.0	B. M. base of rail, east end of Georgia Railroad bridge, Carey	465.93
58.8	Willis Ferry, cottonwood tree on left bank, north side of road	435.67
58.8	Willis Ferry, water surface	430
59.8	Ironwood tree on left bank, 25 feet below mouth of Town Creek	440.21
59.8	Mouth of Town Creek, water surface	430.3
65.0	Hickory on right bank, 10 feet from mouth of Greenbrier Creek	439.5
65.0	Mouth of Greenbrier Creek, water surface	437.6
65.7	Daniels Ferry, large water oak on right bank, 120 feet from river	451.14
65.7	Daniels Ferry, water surface	438
66.8	Leaning willow on right bank, opposite mouth of Fishing Creek	447.27
66.8	Mouth of Fishing Creek, water surface	440.6
68.4	Mouth of Harris Creek, water surface	444
69.0	One mile below Wrays Ferry and one-half mile above Harris Creek, water surface	445
70.0	Wrays Ferry, water surface	446.2
70.0	Wrays Ferry, box elder on right bank, 20 feet from river	462.39
71.2	Mouth of Allison Creek, water surface	448
71.2	Mouth of Allison Creek, birch on right bank	454.44
72.7	Mouth of Rose Creek, water surface	450.8
72.7	Large leaning willow, on right bank, 40 feet below Rose Creek	454.38
72.9	Scull Shoals, 125 feet above ferry, water surface	453.4
72.9	Scull Shoals, white oak on left bank, 125 feet above ferry	460.96
76.2	Mouth of Falling Creek, water surface	456.6
76.2	Maple leaning over Falling Creek, on left bank, 30 feet above mouth	464.73
78.6	Mouth of Big Creek, water surface	459.7
78.6	Large maple on left bank of Big Creek, 75 feet from mouth	464.65
83.3	Mouth of Shoal Creek, water surface	465
83.3	Sycamore on left bank of Shoal Creek, 8 feet from mouth	471.95
83.7	Foot of Barnetts Shoals, water surface	466.2
83.7	Foot of Barnetts Shoals, willow on left bank	474.9
86.0	Top of Barnetts Shoals, 600 feet below bridge, water surface	517.7
86.0	Large mulberry on left bank, 600 feet below Barnetts Bridge	532.2
86.1	Barnetts Bridge, water surface	517.8
86.1	Barnetts Bridge, nail in right bank pier, 1½ feet above ground	523.76
87.5	Mouth of Cedar Creek, water surface	518.3
88.9	Junction of North Oconee and Middle Oconee rivers, water surface	519.8
88.9	Twin willow on right bank, opposite mouth of North Oconee	528.62

Elevations on Oconee and Middle Oconee rivers above Milledgeville—Continued.

MIDDLE OCONEE RIVER.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
89.5	Central Railroad bridge, water surface	525.3
90.8	Simonton's wagon bridge, water surface	530.2
90.8	Nail in left-bank pier, 2 feet from ground	544.08
92.0	Opposite mouth of Barbers Creek, water surface	536
93.5	Princeton Factory, 60 feet below end of tailrace, water surface	541
93.5	Sycamore on left bank, 100 feet above Princeton Bridge	546.31
93.7	Princeton Factory, headrace above wheels, water surface	557.4
95.0	Bobbin Mill Creek, water surface	558.9
95.0	Root of birch on left bank, 75 feet below Bobbin Mill creek	566.32
96.7	Below Jennings Shoal, water surface	561.5
96.7	Above Jennings Shoal, water surface	566.5
96.7	Ring cut on old masonry pier, 30 feet from river, left bank	575.08
97.9	River surface at Mitchells Bridge	572.2
97.9	Nail in upstream face of left bank pier, 5 feet from ground	577.15
98.3	Above dam at Athens electric plant, water surface	598.3
99.8	Seaboard Air Line railroad bridge, water surface	599
104.6	Foot of Tallassee Shoal, water surface	607.5
104.6	Large birch at mouth of tailrace, left bank	624.67
105.2	Crest of dam at Tallassee bridge water power, water surface	654.5
105.2	Spillway of headrace, Tallassee bridge water power, water surface	655
107.0	Upper end of pond, water surface	655
108.5	1,400 feet below Nixons Ford, water surface	659.5
108.5	Sycamore on right bank, 1400 feet below Nixons Ford	670.22
108.8	Above small shoal at Nixons Ford, water surface	662.8
109.4	Water surface	663.2
110.7	Water surface	666.6
111.4	Water surface	670
112.5	Lanier's pasture, water surface	672.6
112.9	Mouth of McCleskey's Branch, water surface	674.6
112.9	White oak on right bank, McCleskey Branch	692.35
113.5	Mouth of Beech Creek, water surface	674.6
113.5	Large hickory on left bank, opposite Beech Creek	686.52
114.8	Mouth of Mulberry Fork, water surface	677.6
114.8	Large wahoo, 5 feet from left bank, opposite Mulberry Fork	686.51
115.9	McElhannon Bridge, water surface	678
118.7	Bend of river, one-half mile below Johnson's Mill, water surface	690
119.2	Below Johnsons milldam, water surface	690.7
119.2	Above Johnsons milldam, water surface	698
119.2	Top of left bank iron pier, upstream truss, Johnsons Bridge	713.21
121.9	Shockleys Bridge, water surface	699.7
123.2	Howards Bridge, water surface	701
126.8	Mouth of Academy Branch, water surface	704.5
128.3	Gainesville, Jefferson and Southern Railroad bridge, water surface	715.8
128.3	Nail in base of first bent, upstream, left bank, over Pond Fork	725 1

SURVEY OF APALACHEE RIVER.

The survey of Apalachee River was made in July and August, 1902, by J. B. High, under the direction of B. M. Hall, of the United States Geological Survey.

Elevations on Apalachee River from mouth to High Shoals.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0	Carey, water surface	426
1.5	Penick's Ferry, water surface	427.7
1.5	Penick's Ferry, sweet gum 50 feet from right bank	437.02
9.8	Below Reid's old dam, water surface	440.8
9.8	Above Reid's old dam, at mouth of Goose Creek, water surface	441.9
10.7	Reids Ferry Bridge, water surface	442
10.7	Reids Ferry Bridge, top of downstream iron pier, left bank	446.35
13.2	Mouth of Hard Labor Creek, water surface	444.4
13.2	Birch on right bank, 10 feet below mouth of Hard Labor Creek	449.76
16.3	Trimbles Bridge, water surface	452.4
16.3	Trimbles Bridge, large ash on island at center of bridge	455.63
21.8	Heads Bridge, top of upstream iron pier, right bank	500.53
21.8	Below Head's old milldam, water surface	477.3
21.8	Above Head's old milldam, water surface	480.8
21.9	Foot of Furlow Shoals, water surface	480.8
22.3	Base of rail, Central Railroad bridge	559.08
22.4	Top of Furlow Shoals, water surface	507.2
25.0	Mouth of Jacks Creek (river high from rain)	517.9
25.0	Large hickory on Jacks Creek, 50 feet from right bank of river	526.23
27.1	Foot of shoals, 1,000 feet below Price's mill, water surface	544.6
27.3	Above dam at Price's mill, water surface	564
27.3	Bench mark cut in large rock on right bank, 50 feet below dam	565.9
31.6	Below foot of shoal, water surface	580.7
31.8	Near bridge at High Shoals Factory, water surface	628.8
31.8	Top of projection of rock basement, southwest corner High Shoals Factory	631.44

SURVEY OF MULBERRY FORK OF OCONEE RIVER.

The survey of Mulberry Fork of Oconee River was made in July and August, 1902, by J. B. High, under the direction of B. M. Hall, of the United States Geological Survey.

Elevations on Mulberry Fork of Oconee River from mouth up to Hoschton.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0	Mouth of Mulberry Fork, water surface	677.6
0.3	Lower Mulberry Bridge, water surface	679.1
4.3	Hancocks Bridge, water surface	691
4.3	Hancocks Bridge, top of iron pile, right bank, downstream	702.79
9.8	Moons Bridge, water surface	707.5
12.8	Gainesville, Jefferson and Southern Railroad bridge, water surface	718.7
16.7	Mathis bridge, water surface	735.5
18.6	Mulberry Forks, 2 miles from Hoschton, water surface	739.2
18.6	Root of large post oak, left bank, 25 feet below fork	743.7

WATER POWER IN ALTAMAHA RIVER DRAINAGE BASIN.

In the foregoing lists of water-surface elevations a complete statement of the fall and its distribution is given. The various points at which the surface elevations are shown are located by continued distances and reference to describable objects along the river. Records of the discharge at several hydrographic stations have been given, from which estimates of flow can be made for any point. To these is added a brief statement regarding the powers already developed, and some of the proposed grouping of the various shoals into proposed power developments.

WATER POWERS ON SOUTH RIVER.

From the Southern Railway bridge crossing South River near Constitution down to the head of Albert Shoals, a distance of 20 miles, the fall is about 100 feet. The stream is small, however, and only small amounts of power are obtainable. Flake's mill, about 13 miles from the beginning point, is the first power now utilized. At this place the dam is about 6 feet high and the working head, obtained by the use of a short canal, is about 11 feet.

At Flat Shoals, about 4 miles farther down the river, a new electric plant has been recently established. At Albert Shoals there is a fall of 16 feet in half a mile. This has been partly developed, but is not now used.

At Peachstone Shoals, 36 miles from the initial point, the power is developed by a low dam and a short canal, utilizing about 10 feet head, and operating Zackry's grist and cotton mill.

At Snapping Shoals, 7 miles below, the fall is 20 feet in 300 yards. This is partly utilized and operates De Loach's wood-working, flouring, and grist mills.

Three miles below is Island Shoals, where the fall is 10 feet in 250 yards and is partly developed at Haley's flour mill.

WATER POWERS ON OCMULGEE RIVER.

At the junction of Yellow and South rivers is the head of Barnes Shoals, where the fall is 9 feet in a short distance. A development here would have the additional water from Yellow River. Includ-

ing the last-mentioned shoal, the fall is 14 feet from Yellow River down to Alcovy River.

Below Alcovy River down to the foot of Lloyds Shoals, 1 mile above Pittmans Ferry, the fall is 55 feet in a little less than 5 miles.

The continuous shoals that make up this fall of 55 feet are known locally as Dotsons, Barnetts, Barnes, and Capps and Lloyds. The most precipitous part of this slope is the lower half, which has a fall of 43 feet in 2½ miles, and is known as Lloyds, or Capps and Lloyds, Shoals. Surveys have been made for a 60-foot development of this power, to back water to the foot of Barnes Shoals, near mouth of Yellow River, and to raise the water level 5 feet at the mouth of Alcovy River. This development can be made with a dam near foot of Lloyds Shoals, or as contemplated in the surveys mentioned, by a lower dam farther up, and a canal.

Smiths Shoals, extending from below Giles Ferry to Smith's mill, has a fall of 12 feet in 1½ miles. This is partly developed for Smith's mill by a low dam and a long, small canal.

The next power below is at Lamar's mill, a large merchant mill for grinding corn and wheat. The fall here is about 20 feet in 1 mile. About 16 feet of the fall is partly developed by a wing dam and a short canal. If the dam were extended and raised 4 feet, the head would be 20 feet, without backing water on the next property above. The last three powers mentioned—Lloyd's, Smith's, and Lamar's—are above the Flovilla hydrographic station, located at Lamars Ferry.

The next power is at Juliette, where the fall is 15 feet in one-half mile. This is developed by a dam and a short canal, and operates the Glover Cotton Mills and the Juliette Milling Company's plant. From the tail water below the Glover mill to the mouth of Beaverdam Creek, below Holton, a distance of about 18 miles, there is a fall of about 60 feet. Macon capitalists have had surveys made for a proposed development of this fall, or a large portion of it.

WATER POWERS ON YELLOW RIVER.

Yellow River flows in a southeasterly direction, and joins South River, forming the Ocmulgee. It contains some valuable power sites, both developed and in a natural condition.

One-half mile above its mouth are the Indian Fishery Shoals,

where there is a fall of 12 feet in about 200 feet. The river is here about 300 feet wide. A gristmill and a cotton gin in operation use perhaps nine-tenths of the available power.

For 13 miles above, the river runs between high banks, alternating with low bottoms without any marked shoals (except at Lees, where there is a fall of 2½ feet) to Langdons Shoals. The total fall in this 13 miles is 23 feet. Langdons Shoals has a 4-foot fall.

Three miles above, at Porterdale, is the finest power site on the river, where extensive developments have been made by the Bibb Manufacturing Company, which has a large cotton and twine factory at this point. Here there is a fall of 67 feet in one-half mile, with a 12-foot dam at the upper end of the shoal. The banks at the foot are very high, but gradually lower, until just above the dam large bottoms begin and continue for 5 miles. The water is backed up as far as the mouth of Hurricane Creek, 5 miles above.

The next power, McDaniels Shoals, has a 7-foot fall in a very short distance, and there is now a 6-foot dam operating a gristmill. At Milstead, Ga., 4½ miles above, there is a fall of 45 feet in one-half mile. This power has recently been developed and is used to operate a large cotton mill.

Eleven miles above is Annistown Shoals, with a 25-foot fall below the 11-foot dam, which formerly supplied storage for power used to operate a cotton mill. The banks here are all hard, unseamed rock, and the site could be developed into valuable property. Two and one-half miles above are some shoals with a 14-foot fall in half a mile. Above this point the river flows through a very rough country, having a fall of about 36 feet in 6 miles, but passing no important shoals until the next power is reached at Yellow River, Ga., the end of the survey. Here is a dam 7.3 feet high, which operates the Simon roller mills.

WATER POWER ON ALCOVY RIVER.

From the mouth of Alcovy River up to the foot of Whites Shoals, a distance of 9 miles, the fall is 25 feet. Whites Shoals and Newton Factory Shoals form one continuous series, with a fall of 83 feet in 1 mile. Here the river is in a gorge 300 feet wide, with banks over 100 feet high in several places. Near the middle of this shoal is an excellent site for a dam, from which a canal about one-half mile long

would be required. At the upper end of the shoals is another good site for a dam, which would have a much greater storage basin, as just above the gorge widens a great deal and a large volume of water could be stored through the dry season. This development would require a canal for the entire length of the shoals. An old corn mill is in operation at this point, using a small wooden dam to divert the water into its flumes. Many years ago a large cotton factory stood on this site, but was burned and never rebuilt.

Six miles above these shoals are Henderson Shoals, with a fall of 2 feet. To obtain power for a gristmill, a 6-foot dam has been erected, the backwater from which extends to Dabneys Bridge, 4 miles above.

WATER POWER ON TOWALIGA RIVER.

Towaliga River flows in a southeasterly direction and empties into Ocmulgee River. From its mouth up to the foot of High Falls, a distance of 21 miles, the fall is about 100 feet. The stream is narrow and swift, but has no marked shoals in this portion nor any favorable power sites. At High Shoals there is a fall of 95 feet in a distance of 1,000 yards, in the middle of which there is a sudden drop of 42 feet, known as High Falls. This is an excellent power site, for, although the low-water flow is small, there is a good basin above for storage. This power has been recently developed and an electric plant installed.

WATER POWERS ON OCONEE RIVER AND TRIBUTARIES.

At Milledgeville a large mill for grinding wheat and corn is operated by water power, the development for which is a low dam across Oconee River and a canal along the west bank about one-half mile long.

At the foot of Furmans Shoals, about 4 miles above Milledgeville, begins a very fine water power. The fall here is 41 feet up to the mouth of Little River, 7 miles above, about 30 feet of the fall being in half the distance. Extensive surveys for the development of the power have been made, and more recently it is proposed to develop about 50 feet of head, backing water above the mouth of Little River.

From the mouth of Little River to the foot of Laurens Shoals,

a distance of 19 miles, the fall is 56 feet, and is almost uniformly distributed.

At Laurens Shoals the fall is 31 feet in 3½ miles. Immediately above, at Rileys or Methodist Fishery Shoals, the fall is 30 feet in three-fourth mile, and continuing up the river, the fall is 15 feet in the next 1½ miles, to top of Long Shoals.

The last three shoals have a total fall of 77 feet from the foot of Laurens Shoals to the head of Long Shoals, a distance of 6¼ miles.

At Park's mill, 3½ miles below the mouth of Apalachee River, the working head is 10 feet, developed by a dam of that height. In the 22 miles above Park's mill to foot of Scull Shoals the fall is only 25 feet. At Scull Shoals the fall is about 6 feet in several miles length.

At Barnetts Shoals there is a fine water power, the fall being 51 feet in a distance of 2¼ miles. About 3 miles above is the junction of North Oconee and Middle Oconee rivers. On each of these streams there are several developed water powers in the vicinity of Athens.

MINOR ATLANTIC DRAINAGE BASINS.

SATILLA RIVER DRAINAGE BASIN.

MISCELLANEOUS MEASUREMENTS.

Satilla River.—A measurement was made September 9, 1904, at the covered wagon bridge, 3 miles east of Waycross. The bench mark is the center of lag bolt driven into the left side of the first floor beam from the first pier from the left bank, 20.00 feet above the datum of the gage.

Width, 108 feet; area, 1,077 square feet; mean velocity, 1.07 feet per second; gage height, 8.2 feet; discharge, 1,150 second-feet.

Hurricane Creek.—This stream is an important tributary of Satilla River, entering from the north. A measurement was made on it on September 10, 1904, at Baxley's bridge, near Blackshear. The bench mark is a large nail driven into the downstream end of the floor beam over the second pier from the right bank, 15.00 feet above the datum of the gage.

Width, 67 feet; area, 415 square feet; mean velocity, 1.35 feet per second; gage height, 6.57 feet; discharge, 562 second-feet.

APALACHICOLA RIVER DRAINAGE BASIN.

DESCRIPTION OF BASIN.

The rivers flowing into the eastern portion of the Gulf of Mexico are for the most part similar in character to those in the Southern Atlantic drainage, though in their lower courses their flow is usually more sluggish.

Apalachicola River is formed by the union of Flint and Chattahoochee rivers at the Georgia-Florida line and flows in a southerly direction through Florida to the Gulf of Mexico. It is navigable, and boats run up Flint River to Albany and up the Chattahoochee River to Columbus.

Flint River rises a few miles south of Atlanta, in Fulton County, and flows in a southerly direction to Talbot County, southeasterly to Macon County, southerly to Worth County, and southwesterly to Apalachicola River. It drains the south-central portion of Georgia, extending from Atlanta south to the Florida line. Its tributaries are mainly large creeks with much fall. The principal ones among these are Whitewater, Redoak, Big Potato, Muckalee, Kinchafoonee, Ichawaynochaway, and Spring creeks.

Flint River has many good water powers on its course. Between Woodbury and Knoxville, Crawford County, a distance of about 45 miles, the river falls 334 feet. Very little of its power is yet developed.

Chattahoochee River rises in the Blue Ridge, in White County, and flows in a southwesterly direction until it reaches the Alabama line at the southwest corner of Troup County. From there it flows in a southerly direction, forming the western boundary of Georgia, until it flows into Apalachicola River at the southern boundary of the State. It drains almost all of the north-central, middle-west, and southwest portions of Georgia, and has a drainage area of 4,900 square miles at Columbus, which is at the fall line.

Soque River joins the Chattahoochee on the western edge of Habersham County. This river rises in Habersham County and flows in a southwesterly direction. It has considerable fall, dropping as much as 40 feet within a few hundred feet.

Farther down the Chattahoochee, at the west boundary of Hall County, Chestatee River enters. It rises in Lumpkin County and

flows in a southerly direction through a very hilly and steep country and has much fall all along its course.

From its source down to Columbus the Chattahoochee River is an excellent water-power stream. From the lower edge of Lumpkin County down to Columbus, Ga., there is a fall of over 850 feet, 366 feet of this fall being between West Point and Columbus. All along its course there are many small tributaries flowing from a high, hilly country. These have much fall, and many small water powers are available.

STREAM FLOW.

CHATTAHOOCHEE RIVER NEAR CORNELIA.

This station was established as a bench-mark station. It is located at Duncan Bridge, about 7 miles northwest of Cornelia, Ga., and 1 mile below the mouth of Soque River. Discharge measurements are made from the downstream side of the inclosed wooden highway bridge, the meter being lowered through holes cut in the floor or by raising a plank. The initial point for soundings is the end of the bridge at the left bank, downstream side. The channel is curved for about 500 feet above and straight for about 800 feet below the station. The current is moderate. The right bank is clean, and overflows for about 200 feet. The left bank is high, rocky, wooded, and does not overflow. The bed of the stream is composed of rock at the left and silt at the right bank, free from vegetation, and shifting. There is but one channel at all stages, broken by the piers of the bridge. A fish-trap dam about 800 feet below the bridge will probably affect the rating at this station. The bench mark is the top of downstream stringer at a point 59 feet from the left end of the bridge; elevation, 21.00 feet above datum.

Discharge measurements of Chattahoochee River near Cornelia, Ga.

Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*
June 8	1.40	487
September 30	.95	253
October 29	.91	215

CHATTAHOOCHEE RIVER NEAR GAINESVILLE.

This station was established on June 26, 1901, 3½ miles northwest of Gainesville, at Thompson's bridge and was discontinued December 31, 1903.

The channel is slightly curved for 1,000 feet above and below the station. The bed is of sand and is very changeable. The bridge from which discharge measurements were made is a three-span wooden structure supported on stone piers. At low water nearly the whole of the river flows through the center span, which is 100 feet long. It is entirely housed in, but holes are cut in the floor along the upstream side at intervals of 12 feet, through which the meter can be lowered for gaging. The initial point for soundings is the end of the bridge on the left-bank upstream side.

The gage as originally established was a 15-foot vertical rod, on the right bank about 50 feet below the bridge. A standard chain gage is attached to a beam on the upstream side of the bridge about 160 feet from the initial point for soundings; length of the chain from the end to marker, 34.68 feet. The observer was Jack Elrod. Bench mark No. 1 is the top of the downstream wooden stringer supporting the bridge floor, about 2 feet to the left of the first stone pier on the left bank; elevation, 31.00 feet above gage datum. Bench mark No. 2 is a copper plug set in solid rock on the hill about 50 feet from the river and 115 feet downstream from the bridge on the right bank; elevation, 42.73 feet above gage datum.

Discharge measurements of Chattahoochee River near Gainesville.

Date	Gage height	Discharge	Date	Gage height	Discharge
1901	*Feet*	*Sec.-ft.*	1903	*Feet*	*Sec.-ft.*
July 16	5.72	2,777	January 10	3.09	958
October 25	3.00	993	March 28	5.43	2,670
1902			April 24	4.80	2,248
February 7	3.65	1,482	May 4	4.87	2,284
May 3	3.80	1,241	June 25	3.40	1,519
July 11	2.58	704	August 1	3.16	1,052
October 11	2.80	715	August 29	2.52	677
November 24	2.33	520	September 25	2.43	728
			December 9	2.22	531

Daily gage height, in feet, of Chattahoochee River near Gainesville.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1901												
1							3.8	2.8	5.1	4.0	3.0	2.3
2							3.6	2.8	5.0	3.9	3.0	2.3
3							3.5	2.8	4.6	3.7	2.9	2.3
4							3.4	2.7	4.5	3.5	2.9	2.4
5							3.2	12.0	4.1	4.0	2.9	2.4
6							3.3	8.5	4.0	4.1	3.0	2.4
7							3.2	5.2	3.9	4.0	3.0	2.6
8							3.4	5.0	3.7	4.0	2.8	2.8
9							3.2	3.2	4.1	3.9	2.8	3.6
10							3.2	4.8	4.0	3.9	2.8	4.6
11							3.1	4.8	5.5	3.7	2.8	4.3
12							3.0	2.9	5.5	3.8	2.7	4.1
13							3.0	3.6	4.2	3.6	2.7	4.0
14							3.1	3.2	3.8	3.5	2.7	4.0
15							3.1	2.8	3.5	3.6	2.6	3.9
16							6.5	5.6	3.9	3.5	2.6	3.4
17							4.5	6.8	11.0	3.4	2.5	3.8
18							5.5	5.8	6.0	3.4	2.5	3.6
19							8.6	3.5	4.6	3.4	2.4	3.7
20							5.9	4.8	4.2	3.4	2.8	3.9
21							5.0	6.5	3.8	3.3	2.7	4.6
22							4.9	12.0	3.4	3.3	2.5	4.2
23							3.8	15.0	3.2	3.2	2.5	4.0
24							3.1	6.5	3.8	3.0	2.8	4.6
25							3.0	5.6	3.7	3.1	2.7	4.4
26						4.0	2.8	6.0	3.5	3.1	2.5	4.2
27						8.6	3.2	5.0	4.0	3.1	2.4	5.6
28						5.1	3.0	5.5	3.8	3.1	2.4	9.6
29						4.2	3.1	7.0	3.9	3.1	2.3	28.4
30						5.6	2.8	6.5	3.8	3.0	2.2	12.6
31							3.0	6.0		3.0		8.4
1902												
1	8.0	4.9	14.0	5.5	3.1	3.5	2.3	3.1	4.2			
2	6.4	15.6	6.0	5.3	3.4	3.4	2.0	3.0	4.0			
3	6.3	10.4	5.9	5.0	4.6	3.2	7.9	4.2	4.5			
4	6.0	9.3	5.6	4.6	4.5	3.0	6.3	3.6	4.5			
5	5.6	6.1	5.0	4.2	4.2	3.0	4.2	2.8	4.6			
6	4.2	5.0	4.9	4.0	4.0	2.9	4.2	2.6	4.8			
7	3.6	4.1	4.8	3.9	4.6	2.9	4.0	3.0	4.5			
8	3.4	4.0	6.8	3.9	4.8	2.8	4.0	2.8	4.3			
9	3.4	3.9	5.6	3.6	4.3	2.8	3.8	3.1	4.9			
10	3.4	3.8	5.3	3.4	5.0	3.0	3.6	4.0	4.6			
11	3.3	3.6	5.0	3.4	4.9	3.0	3.5	4.6	4.8			
12	3.2	3.5	4.8	3.4	4.6	2.9	3.2	4.0	4.6			
13	3.2	3.6	4.6	3.3	4.3	2.9	3.0	3.6	4.5			
14	3.1	3.5	4.2	3.2	4.0	2.8	4.0	3.6	4.2			
15	3.0	3.3	4.6	3.1	4.0	2.8	3.8	3.6	4.6			
16	3.0	3.2	6.3	3.2	4.0	2.9	2.9	3.1	4.8			
17	2.9	3.1	5.6	3.8	4.0	3.0	4.6	3.6	4.0			
18	2.8	3.2	4.3	3.9	4.0	4.0	4.0	3.1	4.2			
19	2.8	3.3	4.2	3.5	4.1	3.8	3.6	3.6	4.6			
20	2.7	3.4	4.0	3.6	4.0	3.6	3.5	2.8	4.8			
21	2.6	3.0	4.0	3.4	3.9	4.2	3.4	2.8	4.6			
22	2.6	3.0	3.9	3.2	3.4	4.0	4.2	3.1	4.8			
23	2.6	2.9	3.8	3.8	6.0	4.0	3.6	4.0	4.0			
24	3.6	2.9	3.6	3.6	5.3	3.8	4.0	4.6	3.6			
25	3.8	2.9	3.6	3.4	5.0	3.4	3.1	4.0	3.7			
26	3.8	3.0	3.5	3.4	4.8	3.4	2.6	4.6	4.0			
27	3.7	6.0	7.6	3.4	4.6	3.4	2.5	4.0	4.6			
28	3.6	26.4	15.6	3.5	4.3	2.8	3.0	3.6				4.0
29	3.6		18.4	3.4	4.0	2.8	4.0	4.2				3.9
30	3.5		10.6	3.2	3.6	2.4	3.4	4.2				3.8
31	4.6		6.4		3.5		2.8	4.6				3.7

Daily gage height, in feet, of Chattahoochee River near Gainesville—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	3.5	3.5	8.0	6.1	4.6	7.0	3.6	3.0	2.6	2.4	2.2	2.2
2	3.4	3.7	6.0	5.7	4.5	13.2	3.6	3.1	2.6	2.3	2.3	2.1
3	3.7	4.4	4.6	5.5	4.7	9.0	3.5	3.2	2.6	2.3	2.5	2.1
4	4.2	7.4	4.2	5.4	4.8	6.5	3.5	3.2	2.6	2.3	2.6	2.1
5	3.9	6.0	4.0	5.3	4.4	10.6	3.5	3.1	2.6	2.3	2.7	2.1
6	3.6	4.5	5.1	5.1	4.2	6.2	3.8	3.1	2.6	2.3	2.7	2.2
7	3.4	4.9	4.7	5.0	4.2	5.9	3.4	3.0	2.6	2.3	2.6	2.2
8	3.4	11.2	5.7	3.6	4.2	5.8	3.4	3.0	2.6	2.6	2.3	2.2
9	3.2	6.4	5.4	5.7	4.2	5.4	3.4	2.9	2.6	2.4	2.3	2.2
10	3.1	5.3	6.0	5.5	4.1	5.1	3.4	2.8	2.6	2.4	2.3	2.2
11	6.0	12.1	12.9	5.4	4.0	5.0	3.7	4.1	2.6	2.3	2.3	2.2
12	5.4	8.7	7.0	5.1	3.9	4.8	6.3	2.9	2.6	2.2	2.4	2.2
13	4.1	5.4	6.0	15.8	4.0	4.0	4.5	3.2	2.6	2.2	2.4	2.5
14	3.7	5.0	5.1	9.7	4.3	4.0	3.7	3.3	2.6	2.2	2.4	2.6
15	3.6	4.2	5.0	6.6	4.1	3.9	3.5	4.1	6.0	2.2	2.3	2.3
16	3.5	9.9	4.9	5.8	4.0	3.9	3.4	7.5	4.7	2.2	2.2	2.2
17	3.5	15.6	4.7	5.5	4.0	3.8	3.4	5.8	3.9	2.2	2.4	2.2
18	3.4	7.1	4.5	5.3	4.0	3.8	3.2	5.0	3.1	2.2	3.1	2.2
19	3.3	5.4	4.4	5.5	4.0	3.8	3.1	3.5	2.8	2.2	2.8	2.2
20	3.2	5.0	4.1	5.4	3.9	3.8	3.1	5.0	2.6	2.2	2.3	2.6
21	3.2	4.7	7.7	5.1	3.9	3.7	3.1	3.2	2.6	2.2	2.3	2.6
22	3.2	4.5	10.5	5.0	3.8	3.7	3.1	3.0	2.6	2.2	2.3	2.5
23	3.2	4.2	25.2	4.8	3.8	3.6	3.0	2.9	2.6	2.1	2.3	2.3
24	3.2	4.0	9.4	4.8	3.8	3.6	3.0	2.8	2.6	2.1	2.3	2.3
25	3.1	3.8	7.0	4.8	3.7	3.5	3.0	2.8	2.5	2.1	2.2	2.4
26	3.1	3.8	6.3	4.8	3.7	3.7	3.0	2.7	2.5	2.1	2.2	2.4
27	3.1	5.6	5.9	4.7	3.7	4.5	2.9	2.7	2.5	2.1	2.2	2.3
28	3.7	14.5	5.5	4.7	3.6	4.0	2.9	2.6	2.4	2.1	2.2	2.3
29	5.5	.....	6.9	4.6	3.6	3.8	2.9	2.6	2.4	2.1	2.2	2.3
30	4.0	.....	12.2	4.6	3.7	3.7	2.9	2.6	2.4	2.1	2.2	2.3
31	3.7	.....	8.2	.....	5.4	.....	3.2	2.6	.....	2.1	.....	2.3

Rating table for Chattahoochee River near Gainesville from June 26, 1901, to December 31, 1903.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.00	350	3.90	1,585	6.60	3,340	12.00	6,850
2.10	415	4.00	1,650	6.80	3,470	13.00	7,500
2.20	480	4.10	1,715	7.00	3,600	14.00	8,150
2.30	545	4.20	1,780	7.20	3,730	15.00	8,800
2.40	610	4.30	1,845	7.40	3,860	16.00	9,450
2.50	675	4.40	1,910	7.60	3,990	17.00	10,100
2.60	740	4.50	1,975	7.80	4,120	18.00	10,750
2.70	805	4.60	2,040	8.00	4,250	19.00	11,400
2.80	870	4.70	2,105	8.20	4,380	20.00	12,050
2.90	935	4.80	2,170	8.40	4,510	21.00	12,700
3.00	1,000	4.90	2,235	8.60	4,640	22.00	13,350
3.10	1,065	5.00	2,300	8.80	4,770	23.00	14,000
3.20	1,130	5.20	2,430	9.00	4,900	24.00	14,650
3.30	1,195	5.40	2,560	9.20	5,030	25.00	15,300
3.40	1,260	5.60	2,690	9.40	5,160	26.00	15,950
3.50	1,325	5.80	2,820	9.60	5,290	27.00	16,600
3.60	1,390	6.00	2,950	9.80	5,420	28.00	17,250
3.70	1,455	6.20	3,080	10.00	5,550		
3.80	1,520	6.40	3,210	11.00	6,200		

[a] This rating table is based on a tangent, the difference being 65 per tenth.

Estimated monthly discharge of Chattahoochee River near Gainesville.

[Drainage area, 544 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1901					
June 26-30	2,690	1,390	1,975	3.63	0.68
July	4,640	870	1,520	2.79	3.22
August	8,800	805	2,724	5.01	5.78
September	6,200	1,130	1,912	3.51	3.92
October	1,715	1,000	1,327	2.44	2.81
November	1,000	480	792	1.46	1.63
December	17,510	545	2,342	4.31	4.97
1902					
January	4,250	740	1,580	2.81	3.24
February	16,210	935	2,553	4.69	4.88
March	11,010	1,325	3,086	5.67	6.54
April	2,625	1,065	1,479	2.72	3.03
May	2,950	1,065	1,835	3.37	3.89
June	1,780	610	1,139	2.09	2.33
July	4,185	350	1,461	2.69	3.10
August	2,040	740	1,388	2.55	2.94
September 1-27	2,235	1,390	1,922	3.53	3.55
December 28-31	1,650	1,455	1,552	2.85	.42
1903					
January	2,950	1,065	1,442	2.65	3.06
February	9,190	1,325	3,247	5.97	6.22
March	15,430	1,650	3,602	6.62	7.63
April	9,320	2,040	2,861	5.26	5.87
May	2,560	1,390	1,709	3.14	3.62
June	7,630	1,325	2,361	4.34	4.84
July	3,145	935	1,273	2.34	2.70
August	3,925	740	1,258	2.31	2.66
September	2,950	610	883	1.62	1.81
October	740	415	497	.91	1.05
November	1,065	480	599	1.10	1.23
December	740	415	535	.98	1.13
The year	15,430	415	1,689	3.10	41.82

CHATTAHOOCHEE RIVER NEAR BUFORD.

This station was established June 24, 1901, at Stricklands Bridge, about 6 miles southwest of Buford. Discharge measurements are made from the upstream side of the bridge, which is a single-span, iron highway bridge, about 200 feet in length. The wire gage is fastened to the upstream guard timber on bridge floor. The bench mark is the top of the bridge floor, over the upstream end of the second crossbeam from the left bank; elevation, 33.00 feet above gage datum. This station was discontinued December 31, 1901.

Discharge measurements of Chattanooga River near Buford.

Date	Gage height	Discharge	Date	Gage height	Discharge
1901	*Feet*	*Sec.-ft.*	1901	*Feet*	*Sec.-ft.*
April 12	3.40	2,310	August 6	6.90	5,758
June 14	3.47	2,559	October 24	2.46	1,638
July 17	5.38	3,893			

Daily gage height, in feet, of Chattahoochee River near Buford.

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1901							
1	.....	3.9	2.4	5.5	3.4	2.3	2.1
2	.....	3.7	2.2	4.8	4.3	2.3	2.1
3	.....	3.4	2.1	4.5	3.1	2.3	2.5
4	.....	3.2	2.1	4.2	3.0	2.3	2.3
5	.....	3.0	2.2	4.0	2.9	2.4	2.4
6	.....	2.9	2.1	3.9	2.8	2.4	2.3
7	.....	3.1	3.3	3.8	2.8	2.3	2.3
8	.....	3.7	4.9	3.7	2.8	2.3	2.2
9	.....	3.2	3.6	3.5	2.8	2.2	2.3
10	.....	2.8	3.1	3.5	2.8	2.2	2.6
11	.....	2.7	3.5	4.1	2.8	2.2	3.4
12	.....	2.5	3.4	3.9	2.7	2.2	2.6
13	.....	2.6	3.3	3.5	3.1	2.4	2.4
14	.....	2.6	3.3	3.5	2.8	2.3	2.6
15	.....	2.8	7.9	3.4	2.7	2.2	14.0
16	.....	2.6	7.4	3.3	2.7	2.2	5.5
17	.....	9.7	7.2	5.1	2.6	2.1	4.3
18	.....	3.3	9.0	11.0	2.5	2.1	3.4
19	.....	3.9	7.6	5.3	2.4	2.2	3.9
20	.....	4.5	7.4	4.2	2.5	2.3	2.9
21	.....	3.4	11.0	3.9	2.5	2.3	2.6
22	.....	3.3	12.0	3.7	2.5	2.2	2.9
23	.....	3.0	18.0	3.5	2.5	2.2	2.8
24	3.5	2.8	9.2	3.5	2.4	2.5	3.3
25	6.8	2.6	7.5	3.3	2.4	2.3	2.9
26	6.0	2.5	6.0	3.3	2.4	2.3	3.3
27	3.9	2.6	6.2	3.3	2.4	2.2	3.5
28	3.9	2.7	5.9	3.3	2.4	2.1	4.2
29	4.4	3.3	8.2	3.8	2.4	2.2	22.5
30	4.7	2.8	7.3	3.5	2.3	2.2	13.2
31	.....	2.5	6.0	.....	2.4	.....	8.5

Rating table for Chattahoochee River near Buford from June 24 to December 31, 1901.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.10	1,450	3.80	2,700	5.50	4,200	8.40	7,312
2.20	1,500	3.90	2,780	5.60	4,300	8.60	7,536
2.30	1,560	4.00	2,860	5.70	4,400	8.80	7,760
2.40	1,630	4.10	2,940	5.80	4,500	9.00	7,984
2.50	1,700	4.20	3,020	5.90	4,600	9.20	8,208
2.60	1,775	4.30	3,105	6.00	4,700	9.40	8,432
2.70	1,850	4.40	3,190	6.20	4,900	9.60	8,656
2.80	1,925	4.50	3,275	6.40	5,100	9.80	8,880
2.90	2,000	4.60	3,360	6.60	5,300	10.00	9,104
3.00	2,075	4.70	3,445	6.80	5,520	10.50	9,664
3.10	2,150	4.80	3,530	7.00	5,744	11.00	10,224
3.20	2,225	4.90	3,620	7.20	5,968	12.00	11,344
3.30	2,305	5.00	3,710	7.40	6,192	13.00	12,464
3.40	2,380	5.10	3,800	7.60	6,416	14.00	13,584
3.50	2,460	5.20	3,900	7.80	6,640	15.00	14,704
3.60	2,540	5.30	4,000	8.00	6,864	22.50	23,100
3.70	2,620	5.40	4,100	8.20	7,088		

a Above gage height 7.0 feet the rating curve is a tangent, the difference being 112 per tenth.

Estimated monthly discharge of Chattahoochee River near Buford.

[Drainage area, 1,050 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1901					
June 24-30	5,520	2,460	3,554	3.38	0.88
July	8,768	1,700	2,507	2.39	2.76
August	18,064	1,450	4,985	4.75	5.48
September	10,224	2,300	3,031	2.89	3.22
October	3,105	1,560	1,863	1.77	2 04
November	1,630	1,450	1,537	1.46	1.63
December	23,100	1,450	3,624	3.45	3,98

CHATTAHOOCHEE RIVER NEAR NORCROSS.

This station was established June 10, 1902, by M. R. Hall. It is located at Medlock's toll bridge, about 4½ miles north of Norcross. This point is above the mouth of Johns Creek and below the mouth of Suwanee Creek.

The channel is slightly curved for 600 feet above and 700 feet below the station. The current is sluggish at low stages, but not excessively so, and the discharge measurements are considered good at the lowest stage. The right bank is high and will overflow only for 50 feet from the water's edge; the left bank will overflow for about 800 feet at a gage height of from 16 to 18 feet. The bed of the stream is sandy and probably changes.

Discharge measurements are made from the downstream side of the single-span bridge and its approaches. The initial point for soundings is 50 feet to the right of the center of the downstream tubular pier on the right bank.

The original gage was a vertical staff attached to an oak tree on the right bank 100 feet above the bridge. A chain gage, established March 14, 1903, was read in connection with the vertical gage until June 28, 1905, when a standard chain gage was attached to the downstream lower chord of the first panel from the right bank; length of chain, 30.36 feet. The gage is read twice each day by W. O. Medlock. The bench mark is the top of the iron pier on the right bank, downstream side; elevation, 27.00 feet.

Discharge measurements of Chattahoochee River near Norcross.

Date	Gage height	Discharge	Date	Gage height	Discharge
1903	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft.*
January 9	2.70	1,887	October 11	1.32	569
March 14	5.35	4,940	October 14	1.28	558
May 5	4.08	3,543	December 9	1.88	951
May 29	3.15	2,378	1905		
June 26	3.13	2,447	January 13	12.26	16,120
July 17	3.06	2,254	January 13	12.10	15,780
July 17	3.06	2,255	January 13	11.82	14,790
August 19	3.15	2,337	January 14	5.29	4,653
August 19	3.05	2,288	January 14	5.05	4,501
August 19	3.15	2,281	March 2	2.94	1,949
August 19	3.05	2,203	May 27	3.19	2,320
September 26	2.06	1,197	May 27	3.16	2,209
October 23	1.94	1,078	June 28	2.01	1,139
November 25 a	1.95	1,062	September 22	1.51	713
November 25	1 95	1,071	September 22	1.52	733
1904			October 28	1.90	1,035
January 19	2.19	1,419	October 28	1.92	1,054
January 19	2.19	1,362	October 28	1.90	1,042
February 20	3.45	2,607	December 9	8.56	9,521
April 7	2.50	1,496	1906		
June 7	2.54	1,571	February 9	3.11	2,190
June 20	1.53	662	June 11	2.53	1,630
August 9	8.62	9,938	July 28	3.70	2,870
August 9	6.57	6,624	August 25	3.45	2,670
August 10	3.60	2,658	October 27	3.60	2,790
September 28	1.22	537			
September 28	1.22	538			

a Measurement taken at Warsaw Ferry, 1 mile above bridge.

Daily gage height, in feet, of Chattahoochee River near Norcross.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1		2.9	14.1	7.0	4.0	4.5	3.2	3.1	2.1	2.0	1.9	1.9
2		2.8	7.0	6.0	4.0	9.7	3.1	2.6	2.0	2.0	2.0	1.9
3		3.2	5.6	5.5	4.0	7.5	3.3	6.1	2.0	2.0	2.7	1.9
4		5.2	5.0	5.4	4.2	4.9	3.2	3.6	2.0	2.0	2.3	1.9
5		8.3	4.7	5.1	4.1	9.7	3.1	3.2	2.2	2.0	2.4	1.9
6		4.9	4.8	4.8	3.9	11.2	3.0	2.8	2.1	2.0	2.7	1.9
7		4.3	4.6	4.7	3.8	7.3	3.5	2.6	2.0	2.0	2.2	1.9
8		10.6	4.8	5.8	3.8	5.5	3.1	2.5	2.0	2.0	2.1	1.9
9	2.7	8.6	5.3	7.9	3.8	4.7	3.3	2.4	2.3	2.2	2.0	1.9
10	2.6	5.2	5.0	5.4	3.7	4.4	2.9	2.4	2.2	2.2	2.0	2.0
11	2.7	6.4	8.7	5.0	3.6	5.1	3.2	2.4	2.1	2.0	2.0	1.9
12	5.8	11.1	11.5	4.8	3.6	4.9	3.3	2.7	2.0	2.0	2.1	1.9
13	4.2	6.2	6.4	4.7	3.7	4.1	6.8	2.5	2.0	1.9	2.0	2.0
14	3.4	4.9	5.5	12.6	3.8	3.9	4.6	2.5	1.9	1.9	2.0	2.1
15	3.2	4.8	5.1	7.8	3.9	3.7	3.6	3.2	3.6	1.9	2.0	2.2
16	3.0	4.5	4.8	5.9	3.7	3.6	3.2	3.2	4.9	1.9	2.0	2.0
17	2.9	14.9	4.6	5.4	3.6	3.5	3.0	4.3	3.6	2.0	2.0	1.9
18	2.8	13.7	4.5	5.1	3.5	3.5	3.0	5.0	2.8	2.2	2.3	1.9
19	2.7	5.9	4.3	4.9	3.4	3.5	2.9	3.5	2.4	2.2	2.5	1.9
20	2.6	5.1	4.2	4.8	3.4	3.4	2.8	2.7	2.3	2.0	2.1	1.9

VIEW OF THE OCOEE RIVER, NEAR THE GEORGIA-TENNESSEE STATE LINE, SHOWING WATER RAPIDS

Discharge measurements of Chattahoochee River near Norcross.

Date	Gage height	Discharge
1903	*Feet*	*Sec.-ft.*
January 9	2.70	1,887
March 14	5.35	4,940
May 5	4.08	3,543
May 29	3.15	2,378
June 26	3.13	2,447
July 17	3.06	2,254
July 17	3.06	2,255
August 19	3.15	2,337
August 19	3.05	2,288
August 19	3.15	2,281
August 19	3.05	2,203
September 26	2.06	1,197
October 23	1.94	1,078
November 25 *a*	1.95	1,062
November 25	1 95	1,071
1904		
January 19	2.19	1,419
January 19	2.19	1,362
February 20	3.45	2,607
April 7	2.50	1,496
June 7	2.54	1,571
June 20	1.53	662
August 9	8.62	9,938
August 9	6.57	6,624
August 10	3.60	2,658
September 28	1.22	537
September 28	1.22	538
October 11	1.32	569
October 14	1.28	558
December 9	1.88	951
1905		
January 13	12.26	16,120
January 13	12.10	15,780
January 13	11.82	14,790
January 14	5.29	4,653
January 14	5.05	4,501
March 2	2.94	1,949
May 27	3.19	2,320
May 27	3.16	2,209
June 28	2.01	1,139
September 22	1.51	713
September 22	1.52	733
October 28	1.90	1,085
October 28	1.92	1,054
October 28	1.90	1,042
December 9	8.56	9,521
1906		
February 9	3.11	2,190
June 11	2.53	1,630
July 28	3.70	2,870
August 25	3.45	2,670
October 27	3.60	2,790

a Measurement taken at Warsaw Ferry, 1 mile above bridge.

Daily gage height, in feet, of Chattahoochee River near Norcross.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1	.....	2.9	14.1	7.0	4.0	4.5	3.2	3.1	2.1	2.0	1.9	1.9
2	.....	2.8	7.0	6.0	4.0	9.7	3.1	2.6	2.0	2.0	2.0	1.9
3	.....	3.2	5.6	5.5	4.0	7.5	3.3	6.1	2.0	2.0	2.7	1.9
4	.....	5.2	5.0	5.4	4.2	4.9	3.2	3.6	2.0	2.0	2.3	1.9
5	.....	8.3	4.7	5.1	4.1	9.7	3.1	3.2	2.2	2.0	2.4	1.9
6	.....	4.9	4.8	4.8	3.9	11.2	3.0	2.8	2.1	2.0	2.7	1.9
7	.....	4.8	4.6	4.7	3.8	7.3	3.5	2.6	2.0	2.0	2.2	1.9
8	.....	10.6	4.8	5.8	3.8	5.5	3.1	2.5	2.0	2.0	2.1	1.9
9	2.7	8.6	5.3	7.9	3.8	4.7	3.3	2.4	2.3	2.2	2.0	1.9
10	2.6	5.2	5.0	5.4	3.7	4.4	2.9	2.4	2.2	2.2	2.0	2.0
11	2.7	6.4	8.7	5.0	3.6	5.1	3.2	2.4	2.1	2.0	2.0	1.9
12	5.8	11.1	11.5	4.8	3.6	4.9	3.3	2.7	2.0	2.0	2.1	1.9
13	4.2	6.2	6.4	4.7	3.7	4.1	6.8	2.5	2.0	1.9	2.0	2.0
14	3.4	4.9	5.5	12.6	3.8	3.9	4.6	2.5	1.9	1.9	2.0	2.1
15	3.2	4.8	5.1	7.8	3.9	3.7	3.6	3.2	3.6	1.9	2.0	2.2
16	3.0	4.5	4.8	5.9	3.7	3.6	3.2	3.2	4.9	1.9	2.0	2.0
17	2.9	14.9	4.6	5.4	3.6	3.5	3.0	4.3	3.6	2.0	2.0	1.9
18	2.8	13.7	4.5	5.1	3.5	3.5	3.0	5.0	2.8	2.2	2.3	1.9
19	2.7	5.9	4.3	4.9	3.4	3.5	2.9	3.5	2.4	2.2	2.5	1.9
20	2.6	5.1	4.2	4.8	3.4	3.4	2.8	2.7	2.3	2.0	2.1	1.9

VIEW OF THE OCOKE RIVER, NEAR THE GEORGIA-TENNESSEE STATE LINE, SHOWING WATER RAPIDS

Daily gage height, in feet, of Chattahoochee River near Norcross—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
21	2.6	4.7	5.9	4.9	3.4	3.3	2.8	2.6	2.2	2.0	2.0	2.2
22	2.7	4.4	8.0	4.6	3.4	3.3	2.7	2.5	2.2	2.0	2.0	2.3
23	2.6	4.2	16.7	4.5	3.3	3.2	2.7	2.4	2.1	1.9	2.0	2.1
24	2.5	4.0	19.4	4.4	3.2	3.2	2.6	2.3	2.1	1.9	2.0	2.0
25	2.7	3.9	9.0	4.3	3.2	3.1	2.6	2.3	2.1	1.9	2.0	2.0
26	2.7	3.8	6.4	4.4	3.1	3.1	2.5	2.2	2.1	1.9	2.0	2.2
27	2.6	3.7	5.8	4.4	3.1	4.0	2.5	2.2	2.1	1.9	1.9	2.2
28	2.7	3.6	5.5	4.2	3.1	3.8	2.5	2.1	2.1	1.9	1.9	2.0
29	3.6	.....	5.4	4.1	3.1	3.7	2.5	2.1	2.0	1.9	1.9	2.0
30	4.0	.....	10.0	4.0	3.5	3.5	2.5	2.1	2.0	1.9	1.9	2.0
31	3.2	.....	11.4	.....	5.2	.....	2.6	2.3	.....	1.9	.....	1.9
1904												
1	1.9	2.2	2.5	2.55	2.3	2.4	1.7	2.65	1.8	1.35	1.25	1.5
2	1.9	2.1	2.6	2.55	2.25	2.3	1.55	2.7	1.75	1.3	1.3	1.35
3	2.0	2.1	2.6	2.5	2.2	2.3	1.5	2.35	1.7	1.35	1.35	1.4
4	1.9	2.1	2.4	2.4	2.5	2.1	1.45	2.2	1.9	1.2	1.5	1.55
5	1.9	2.1	2.3	2.35	2.4	1.95	1.7	3.1	2.4	1.15	1.65	2.0
6	1.8	2.1	2.3	2.35	2.3	1.9	1.55	2.55	2.1	1.25	1.6	3.45
7	1.8	2.3	4.7	2.5	2.2	2.65	1.5	2.15	2.05	1.3	1.5	2.85
8	2.0	3.0	6.0	3.2	3.6	2.3	1.5	7.7	1.8	1.3	1.45	2.1
9	1.9	2.9	3.9	3.4	4.05	2.05	1.3	3.2	1.7	1.3	1.4	1.9
10	1.9	2.7	3.3	3.7	3.6	1.9	1.3	3.7	1.8	1.15	1.4	1.9
11	1.9	2.7	3.0	3.0	2.8	1.8	1.55	4.5	1.65	1.25	1.4	1.9
12	2.0	2.7	2.85	2.8	2.55	1.9	1.75	3.95	1.55	1.1	1.4	1.8
13	2.0	2.5	2.7	2.7	2.4	1.8	1.85	2.85	1.6	1.3	1.6	1.7
14	2.1	2.3	3.2	2.6	2.35	1.8	1.9	2.55	1.55	1.3	1.65	1.7
15	2.1	2.3	3.1	2.5	2.35	1.7	1.6	2.4	1.5	1.2	1.6	1.65
16	2.0	2.3	2.75	2.5	2.25	1.7	1.6	2.5	1.45	1.25	1.5	1.65
17	2.2	2.2	2.6	2.55	2.2	1.7	1.85	2.15	1.45	1.25	1.5	1.7
18	2.5	2.1	2.55	2.5	2.2	1.65	1.5	2.0	1.45	1.15	1.45	1.7
19	2.2	2.3	2.5	2.45	2.15	1.2	1.65	1.9	1.4	1.1	1.45	1.6
20	2.1	3.5	2.45	2.4	2.15	1.6	1.4	2.0	1.4	1.1	1.45	1.6
21	2.0	3.6	2.6	2.4	2.1	1.5	1.7	2.2	1.4	1.1	1.4	1.6
22	2.8	4.9	3.0	2.4	2.1	1.45	1.85	1.85	1.4	1.25	1.55	1.6
23	3.1	5.3	3.4	2.4	2.05	1.35	2.05	1.7	1.4	1.25	1.8	1.55
24	3.3	4.0	3.6	2.35	2.0	1.25	1.7	1.8	1.45	1.2	1.85	1.55
25	2.6	3.3	3.5	2.3	2.0	1.2	1.6	2.05	1.4	1.2	1.65	1.7
26	2.4	2.9	3.2	2.3	2.0	1.2	1.8	2.0	1.3	1.25	1.55	1.85
27	2.3	2.8	3.0	2.45	1.95	1.4	1.8	2.4	1.2	1.3	1.5	1.95
28	2.2	2.6	2.9	2.5	1.9	1.95	1.6	2.8	1.2	1.2	1.45	3.8
29	2.2	2.6	2.75	2.35	1.9	2.3	1.7	2.45	1.25	1.1	1.45	3.55
30	2.2	.....	2.65	2.3	2.0	2.4	2.1	2.05	1.4	1.3	1.5	2.5
31	2.2	.....	2.6	.....	2.5	.....	1.9	1.9	.....	1.3	.....	2.2
1905												
1	2.0	2.15	3.0	2.4	2.65	2.5	10.5	2.0	1.8	1.72	1.72	1.48
2	1.98	2.1	2.95	2.35	2.4	2.4	6.1	1.95	2.15	1.82	1.7	1.6
3	2.0	2.05	2.85	2.3	2.6	2.35	3.3	1.9	2.25	1.68	1.68	3.4
4	1.93	2.05	2.8	2.35	3.3	2.3	2.7	1.85	1.95	1.72	1.68	7.6
5	1.83	2.0	2.7	2.45	3.0	2.25	3.2	1.9	1.85	1.95	1.65	3.6
6	2.02	2.2	2.65	2.6	3.1	2.2	3.8	1.85	1.8	1.72	1.68	2.9
7	3.15	2.95	2.65	2.6	5.3	2.2	4.2	1.9	1.75	1.6	1.82	2.65
8	2.9	3.3	2.7	2.45	4.5	2.1	3.2	2.3	1.72	1.55	2.2	2.85
9	2.35	5.1	2.7	2.5	4.6	2.1	2.85	2.6	1.73	1.5	1.92	7.2
10	2.2	6.7	2.9	2.5	3.5	2.05	3.7	2.7	1.7	1.58	2.1	8.1
11	2.2	5.1	3.3	2.4	3.0	2.0	5.2	3.6	1.68	2.7	1.88	4.4
12	6.5	4.3	3.1	2.4	2.8	2.0	7.4	3.8	1.9	3.5	1.25	3.4
13	11.9	7.7	2.9	2.6	2.7	2.3	6.0	4.2	1.75	2.2	1.2	3.0
14	5.3	6.7	2.8	2.5	2.6	2.1	4.0	3.6	1.72	1.9	1.25	2.85
15	3.7	4.3	2.8	2.4	2.5	2.1	4.2	3.8	1.63	1.82	2.15	2.95
16	3.1	3.6	2.7	2.6	3.9	2.35	3.6	2.9	1.6	1.82	1.92	3.1
17	2.8	3.3	2.6	2.45	4.0	2.45	2.9	2.65	1.6	1.88	1.98	2.9
18	2.65	3.1	2.55	2.35	3.1	2.3	2.8	2.4	1.6	1.78	1.82	2.75
19	2.55	2.95	2.55	2.3	2.8	2.15	2.6	2.3	1.6	1.75	1.75	2.6
20	2.55	4.1	2.55	2.3	2.7	2.1	2.5	2.25	1.6	1.75	1.75	3.2

Daily gage height, in feet, of Chattahoochee River near Norcross—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905[a]												
21	2.5	11.5	2.65	2.3	2.6	2.6	2.7	2.2	1.55	1.7	1.95	5.8
22	2.35	6.9	3.2	2.3	2.8	2.6	2.7	2.1	1.52	1.68	1.88	5.2
23	2.2	5.1	2.85	2.3	4.0	2.7	2.4	2.25	1.53	1.62	1.78	3.8
24	2.2	4.2	2.7	2.2	6.0	2.3	2.2	2.5	1.5	1.62	1.57	3.8
25	2.1	3.8	2.6	2.2	4.0	2.15	2.25	2.4	1.47	1.68	1.52	3.4
26	2.1	3.6	2.6	2.2	3.4	2.0	2.2	2.2	1.48	1.82	1.8	3.2
27	2.25	3.3	2.5	2.3	3.2	2.1	2.15	2.3	1.6	2.2	1.8	2.95
28	2.35	3.2	2.5	2.4	3.0	2.05	2.1	2.0	1.25	1.95	1.75	2.9
29	2.1	.....	2.4	2.4	2.9	2.4	2.1	1.9	1.42	1.8	1.75	3.0
30	2.1	.....	2.5	2.6	2.8	2.25	2.2	1.85	1.47	1.75	1.52	3.1
31	2.1	.....	2.5	.....	2.6	.....	2.2	1.85	.....	1.75	.....	2.85
1906												
1	2.75	3.65	2.6	5.1	3.15	2.6	2.45	5.2	6.2	6.2	3.45	3.1
2	2.65	3.5	2.6	4.4	3.05	2.7	2.3	4.3	5.0	7.8	3.4	3.1
3	6.0	3.4	2.9	4.2	3.0	3.1	2.3	4.2	4.3	11.0	3.35	3.1
4	14.6	3.3	4.4	3.95	3.7	2.75	2.8	3.8	4.1	10.4	3.3	3.1
5	12.2	3.25	3.45	3.8	3.3	2.8	2.6	4.4	5.0	7.0	3.3	3.0
6	5.5	3.3	3.05	3.7	3.15	2.85	2.75	3.85	5.8	6.2	3.3	3.0
7	4.4	3.2	2.95	3.7	4.0	2.7	5.0	4.2	4.8	6.6	3.3	3.1
8	4.0	3.15	4.0	3.6	3.6	2.5	3.8	3.75	5.5	5.6	3.3	3.05
9	3.95	3.1	4.0	3.6	3.2	2.5	5.2	3.35	4.8	5.0	3.25	3.0
10	3.7	3.05	3.45	3.9	3.05	2.45	4.0	3.15	6.0	4.8	3.2	3.2
11	3.5	3.0	3.25	3.65	2.9	2.5	3.0	3.1	4.4	4.5	3.2	5.7
12	3.9	3.0	3.0	3.5	2.9	2.65	3.3	3.0	4.8	4.4	3.25	4.4
13	4.2	3.0	3.0	3.4	2.9	5.0	3.4	3.6	4.0	4.2	3.2	3.6
14	3.75	3.0	3.45	3.35	2.8	4.85	3.9	3.45	3.7	4.1	3.15	3.4
15	3.55	2.95	11.5	3.6	2.8	3.9	7.7	5.4	3.5	4.0	3.3	3.3
16	3.8	2.9	11.1	3.85	2.75	3.85	6.6	6.8	3.4	4.0	3.35	3.2
17	3.9	2.8	5.4	3.55	2.7	3.35	4.7	3.9	3.3	3.9	3.3	3.8
18	3.6	2.8	4.3	3.4	2.7	3.05	3.0	7.3	3.7	4.2	3.85	5.4
19	3.5	2.8	9.0	3.3	2.65	2.9	7.6	8.6	7.0	6.0	6.0	4.4
20	3.4	2.8	14.2	3.3	2.65	2.8	5.6	7.8	7.6	4.4	4.9	4.3
21	3.25	2.8	6.8	3.2	2.6	2.65	5.7	6.8	6.0	4.0	4.1	4.2
22	4.5	2.9	5.2	3.2	2.6	2.5	4.7	4.1	5.9	3.95	3.85	3.85
23	9.4	2.85	4.6	3.15	2.6	2.5	5.1	4.1	5.1	3.85	3.65	3.65
24	6.5	2.75	4.2	3.1	2.5	2.5	5.8	3.8	5.8	3.8	3.45	3.45
25	4.8	2.7	4.0	3.1	2.5	3.05	5.0	3.45	4.8	3.75	3.4	3.35
26	4.4	2.7	3.85	3.1	3.0	2.7	3.8	3.4	5.3	3.7	3.3	3.25
27	4.8	2.7	3.9	3.2	4.2	2.6	3.6	3.9	4.4	3.6	3.3	3.2
28	4.8	2.7	4.4	3.6	3.4	2.4	3.75	4.5	4.2	3.55	3.25	3.4
29	4.6	.....	4.2	3.4	2.9	2.5	4.2	5.2	5.1	3.5	3.15	3.85
30	4.1	.....	5.2	3.25	2.75	2.8	4.6	8.2	5.8	3.5	3.1	3.65
31	3.85	.....	7.0	.....	2.65	.....	5.3	10.8	.....	3.5	.....	8.4

[a] Low gage heights can be accounted for as resulting from storage at the Gainesville water-power plant.

Rating table for Chattahoochee River near Norcross from January 9, 1903, to December 31, 1905.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.10	480	2.90	2,080	4.70	4,170	8.00	8,805
1.20	515	3.00	2,190	4.80	4,295	8.20	9,125
1.30	560	3.10	2,300	4.90	4,425	8.40	9,445
1.40	615	3.20	2,410	5.00	4,555	8.60	9,775
1.50	680	3.30	2,520	5.20	4,815	8.80	10,105
1.60	750	3.40	2,630	5.40	5,075	9.00	10,440
1.70	830	3.50	2,745	5.60	5,345	9.50	11,290
1.80	920	3.60	2,860	5.80	5,615	10.00	12,155
1.90	1,015	3.70	2,975	6.00	5,885	10.50	13,030
2.00	1,120	3.80	3,090	6.20	6,160	11.00	13,920
2.10	1,225	3.90	3,205	6.40	6,440	11.50	14,825
2.20	1,330	4.00	3,320	6.60	6,720	12.00	15,760
2.30	1,435	4.10	3,440	6.80	7,005	12.50	16,725
2.40	1,540	4.20	3,560	7.00	7,295	13.00	17,700
2.50	1,645	4.30	3,680	7.20	7,585	14.00	19,650
2.60	1,750	4.40	3,800	7.40	7,885	15.00	21,600
2.70	1,860	4.50	3,920	7.60	8,185	16.00	23,550
2.80	1,970	4.60	4,045	7.80	8,495		

a Above gage height 12.20 the rating curve is a tangent, the difference being 195 per tenth.

JANUARY 1 TO DECEMBER 31, 1906.

Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.30	1,360	3.60	2,780	4.90	4,870	7.40	7,885
2.40	1,460	3.70	2,900	5.00	4,500	7.60	8,185
2.50	1,560	3.80	3,020	5.20	4,760	7.80	8,495
2.60	1,660	3.90	3,140	5.40	5,040	8.00	8,805
2.70	1,770	4.00	3,260	5.60	5,320	9.00	10,440
2.80	1,880	4.10	3,380	5.80	5,600	10.00	12,155
2.90	1,990	4.20	3,500	6.00	5,880	11.00	13,920
3.00	2,100	4.30	3,620	6.20	6,160	12.00	15,760
3.10	2,210	4.40	3,740	6.40	6,440	13.00	17,700
3.20	2,320	4.50	3,860	6.60	6,720	14.00	19,650
3.30	2,430	4.60	3,980	6.80	7,005	15.00	21,600
3.40	2,540	4.70	4,110	7.00	7,295		
3.50	2,660	4.80	4,240	7.20	7,585		

NOTE.—The above table is based on discharge measurements made during 1905-6 and is well defined.

Estimated monthly discharge of Chattahoochee River near Norcross.

[Drainage area, 1,170 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1903					
January 9-31	5,615	1,645	2,281	1.95	1.67
February	21,400	1,970	6,450	5.51	5.74
March	30,180	3,560	8,167	6.98	8.05
April	16,920	3,320	5,214	4.46	4.98
May	4,815	2,300	2,923	2.50	2.88
June	14,230	2,300	4,463	3.81	4.25
July	7,005	1,645	2,343	2.00	2.31
August	6,020	1,225	2,055	1.76	2.03
September	4,425	1,015	1,466	1.25	1.40
October	1,330	1,015	1,103	.943	1.09
November	1,860	1,015	1,222	1.04	1.16
December	1,435	1,015	1,110	.949	1.09
1904					
January	2,520	920	1,306	1.12	1.29
February	4,945	1,225	1,967	1.68	1.81
March	5,885	1,435	2,227	1.90	2.19
April	2,975	1,435	1,729	1.48	1.65
May	3,380	1,015	1,510	1.29	1.49
June	1,805	515	987	.844	.942
July	1,225	560	814	.696	.802
August	9,125	830	2,079	1.78	2.05
September	1,540	515	764	.653	.729
October	588	480	530	.453	.522
November	968	587	689	.589	.657
December	3,090	588	1,119	.956	1.10
The year	9,125	480	1,310	1.12	15.23
1905					
January	15,570	948	2,238	1.91	2.20
February	14,820	1,120	3,753	3.21	3.34
March	2,520	1,540	1,899	1.62	1.87
April	1,750	1,330	1,540	1.32	1.47
May	5,885	1,540	2,552	2.18	2.51
June	1,860	1,120	1,381	1.18	1.32
July	13,030	1,225	2,786	2.38	2.74
August	3,560	968	1,609	1.38	1.59
September	1,382	538	824	.704	.786
October	2,745	680	991	.847	.976
November	1,330	515	898	.763	.851
December	9,445	667	3,225	2.76	3.18
The year	15,570	515	1,974	1.69	22.83
1906					
January	20,800	1,720	4,660	3.98	4.59
February	2,840	1,770	2,100	1.79	1.86
March	20,000	1,660	4,840	4.14	4.77
April	4,680	2,210	2,750	2.35	2.62
May	3,500	1,560	2,090	1.79	2.06
June	4,500	1,460	2,050	1.75	1.95
July	8,800	1,360	3,940	3.37	3.88
August	13,600	2,100	4,520	3.86	4.45
September	8,180	2,490	4,550	3.89	4.34
October	13,900	2,660	4,670	3.99	4.60
November	5,880	2,210	2,690	2.30	2.57
December	9,440	2,100	3,020	2.58	2.97
The year	20,800	1,360	3,490	2.98	40.60

NOTE.—Values for 1906 are excellent.

CHATTAHOOCHEE RIVER NEAR VININGS.

This station was established in 1905 at a new iron highway bridge 1 mile east of Vinings and about 10 miles northwest of Atlanta. It is about 10 miles below the developed power at Bull Sluice.

The current of the section is fairly good and regular. The bed is probably somewhat shifting, but there is a stretch of swift water immediately below, running among permanent rocks which will probably control the water level at the station. The left bank is high and will not overflow; the right bank is only about 20 feet above low water for a width of 900 feet and will overflow during very high floods.

Discharge measurements are made from a bridge of two 140-foot spans, with 50 feet of wooden approach at the left bank and 100 feet at the right bank.

No gage has been established. The effect of the water power above being to cause a great amount of fluctuation in the flow, the mean daily gage height can be obtained only by the use of an automatic recording gage, and until this is installed the measurements are made mainly as investigations relative to the accuracy of the rating in case the original Chattahoochee River station, which was located at Oakdale, 4 miles below, should be continued at this place. Gage heights are determined directly from the bench mark, which is the top of the upstream end of the second floor beam from the left bank; elevation, 31.00 feet above the datum of the assumed gage.

Discharge measurements of Chattahoochee River near Vinings.

Date	Gage height	Discharge
1905	*Feet*	*Sec.-ft.*
May 4	4.51	1,966
August 18	4.68	2,003
August 18	4.57	1,861
October 17	3.43	856
November 27	3.74	1,002
June 8	4.72	2,080
August 8	5.72	3,620

CHATTAHOOCHEE RIVER AT OAKDALE.

This station was established at Oakdale on October 17, 1895, by Cyrus C. Babb. It is located at the Southern Railway bridge, 1 mile above the mouth of Proctor Creek, 2 miles below the mouth of Peachtree Creek, one-fourth mile west of Chattahoochee, 1 mile east of Oakdale, and 8 miles northwest of Atlanta. The flow is obstructed by rafts, which have to be cleared from the channel occasionally. The channel is straight and the current swift. The banks are subject to overflow. The bed of the stream is constant, and the results are fairly good except at high stages, when the water flows through the trestlework.

Discharge measurements were made from the railway bridge, the initial point for soundings being the end of the iron bridge on the right bank, upstream side.

On July 1, 1898, the location of the station was changed to Mason and Turners Ferry, 1 mile below Oakdale. The gage at this point, known as the "Oakdale lower gage," is nailed to a tree on the right bank, 100 feet below the ferry, and set 1 foot lower than the gage at the Southern Railway bridge. On June 1, 1899, the lower gage was discontinued and the upper gage resumed and adopted by the United States Weather Bureau, the United States Geological Survey still receiving the records and making the current-meter discharge measurements at this point. The gage now used is in two sections, the first, reading from zero to 8 feet, fastened to a willow tree 100 feet above the bridge on the left bank; the second, reading from 8 to 26 feet, fastened to an ash tree 30 feet above the bridge on the left bank. It is set on the same datum as the old wire gage of the United States Geological Survey established at that point by Mr. Babb in 1895, and above referred to. Its zero point is 753.5 feet above sea level. The observer was J. B. Austin.

Bench mark No. 2 is a large bridge spike in a sycamore tree about 50 feet above the bridge on the left bank; elevation, 11.00 feet above the zero of the gage. Bench mark No. 3, determined by measuring down to the water, is the top of the iron girder, 40 feet from the initial point for soundings, on the upstream side of the bridge; elevation, 57.55 feet above the zero of the gage.

The station was discontinued by the Weather Bureau on November 30, 1904, but the single daily readings for several months before that time are not considered reliable as representing the flow of the river, on account of the operation of a large water-power plant above. Only the records for the first five months of that year are used.

The station was reestablished in 1905 at a new iron highway bridge just below the old Mason and Turners Ferry, where the Oakdale "lower gage" was maintained as a regular station during parts of the years 1898 and 1899. It is 1½ miles below the Southern Railway bridge where the Oakdale station was located.

Discharge measurements are made from the bridge of two 130-foot spans, with 300 feet of wooden approach at the right bank and 730 feet at the left. At high floods both banks will overflow to the

extent of the bridge approaches, but can not get beyond at either end. The current is mostly swift and is irregular at places.

Gage heights are determined directly from the bench mark, which is the top of the downstream end of the second floor beam from the right bank; elevation, 35.00 feet above the datum of the assumed gage.

Discharge measurements of Chattahoochee River at Oakdale.

Date	Gage height	Discharge
	Feet	*Sec.-ft.*
1895		
October 15	0.40	1,096
December 14	.69	1,380
1896		
January 14	.70	1,361
January 15	.00	985
January 20	.33	1,153
January 22	1.01	1,380
January 23	.55	1,250
January 24	.28	1,126
July 9	18.05	18,180
July 10	12.80	11,140
July 13	3.01	2,957
July 15	1.88	2,066
July 17	4.60	4,640
July 24	2.22	2,470
August 29	— .18	958
September 9	— .55	744
October 17	— .50	775
1897		
April 24	2.90	3,065
April 27	2.70	2,703
May 22	1.65	2,055
May 25	1.50	2,014
May 31	1.35	1,929
May 31	1.35	2,003
June 9	1.44	1,991
June 16	.94	1,523
June 28	.57	1,306
July 20	12.90	15,620
August 5	.84	1,276
August 27	.33	1,196
September 10	— .12	849
September 17	— .30	778
October 2	— .50	659
November 5	.46	1,194
November 24	— .05	879
December 6	2.65	2,426
December 28	1.70	1,926
1898		
January 21	1.71	2,165
February 28	.65	1,446
April 5	9.95	12,580
May 16	.85	1,501
May 26	.80	1,459
May 28 *a*	*b* 1.30	1,088
June 1 *a*	*b* 1.35	1,137
June 30 *a*	*b* .80	782
July 23 *a*	*b* 2.45	2,292
August 20 *a*	*b* 4.90	4,157
September 5 *a*	*b* 20.10	24,410
November 19 *a*	*b* 4.77	4,735
1899		
March 11 *c*	4.35	4,397
May 1 *c*	3.80	3,452
May 26 *c*	2.36	2,678
June 14 *c*	3.92	4,788
September 9	1.32	1,452
October 6	.67	1,150
October 17	.54	1,083
November 18	.42	988
1900		
January 4	1.53	1,784
March 27	5.85	5,504
July 6	4.00	3,886
September 12	1.08	1,456
November 29	2.32	2,334
1901		
January 12	19.85	21,710
April 11	3.55	3,247
June 19	4.75	4,446
July 30	3.16	2,983
October 24	1.90	1,896
1902		
January 14	2.50	2,477
January 25	2.50	2,104
February 3	16.70	17,590
February 4	7.20	6,573
June 23	1.85	1,902
July 10	1.75	1,689
September 16	1.10	1,300
November 1	.75	1,086
November 20	1.12	1,234
1903		
March 2	9.95	9,787
March 23	21.85	33,620
April 23	5.03	4,836
June 2	12.20	12,480
September 2	1.25	1,612
October 7	1.10	1,359
November 5	1.90	1,882
1904		
February 11	3.28	2,926
March 15	3.50	3,233
May 3	1.38	1,361
June 29	.60	1,030
1905		
April 28 *d*	*e* 4.11	1,284
May 25 *d*	*e* 8.16	4,687
May 25 *d*	*e* 8.30	4,845

a Discharge measurements made at Mason and Turners Ferry and referred to "Oakdale lower gage."

b Gage height from "Oakdale lower gage."

c Measurement made at Mason and Turners Ferry, but referred to the upper gage at Southern Railway bridge.

d Discharge measurement made at the bridge just below Mason and Turners Ferry

e Gage heights referred to the bench mark on the bridge.

Daily gage height, in feet, of Chattahoochee River at Oakdale.

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1895				1895				1895			
1	.....	0.75	0.5	12	.....	1.35	1.1	23	0.2	0.5	2.0
2	.....	1.7	.5	13	.....	1.0	1.0	24	.3	.5	1.2
3	.....	1.0	.55	14	.....	.75	.65	25	.25	.5	1.0
4	.....	.6	.6	15	0.4	.6	.6	26	.2	.55	.55
5	.....	.5	.6	16	.4	.6	.55	27	.25	.55	.8
6	.....	.55	.5	17	.35	.55	.55	28	.25	.7	.75
7	.....	.45	.45	18	.3	.6	.5	29	.3	.75	.7
8	.....	.4	.4	19	.25	.5	.4	30	.5	.45	2.0
9	.....	.6	.4	20	.3	.55	.5	31	.5	.....	2.95
10	.....	.8	.6	21	.2	.5	.65				
11	.....	1.0	1.3	22	.25	.5	1.0				

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1896												
1	3.2	1.7	1.4	1.4	0.75	0.25	−0.35	0.45	−0.4	0.2	0.5	0.65
2	2.0	1.55	1.35	1.7	.75	1.4	− .4	.5	− .6	.1	.5	1.2
3	1.0	1.75	1.43	2.75	.75	1.45	− .45	1.4	− .6	.05	.65	1.7
4	1.2	2.1	1.45	1.85	.7	2.1	+ .15	1.7	− .6	− .2	1.13	3.2
5	1.1	2.2	1.4	1.35	.65	1.6	− .2	.75	− .6	− .3	1.6	2.3
6	1.0	2.8	1.35	1.3	3.15	1.15	− .15	.4	− .6	− .35	1.35	1.3
7	.8	3.7	1.95	1.1	1.7	.6	+2.0	.2	− .6	− .4	1.2	1.15
8	.95	4.3	1.75	1.15	1.2	.4	12.25	.15	− .55	− .5	1.1	1.0
9	1.2	5.8	1.55	1.05	.9	.7	17.7	.15	− .55	− .5	1.0	1.0
10	1.25	6.55	1.5	1.05	.75	.7	18.45	.1	− .5	− .5	1.05	1.0
11	1.0	4.3	1.75	1.05	.65	.65	4.75	.05	− .5	− .6	1.05	.9
12	.85	3.3	1.85	1.0	.6	.5	3.25	.05	− .55	− .6	1.6	.7
13	.8	2.8	1.55	1.0	.5	.3	3.1	.3	− .6	− .55	3.3	.6
14	.75	2.95	1.35	.9	.5	.2	2.9	.25	− .6	− .55	4.6	.65
15	.7	4.1	1.2	.9	.4	−.05	1.95	.05	− .6	− .55	2.6	.7
16	.85	2.9	1.15	.9	.3	+.05	3.0	.1	− .65	− .55	1.5	.65
17	2.4	2.55	1.1	.85	.3	−.05	4.4	.1	− .65	− .55	1.0	.65
18	2.35	2.2	1.35	.85	.25	+.1	2.7	.1	− .65	− .55	.8	.65
19	2.1	2.1	1.7	.85	.25	.15	1.75	−.1	− .65	− .55	.6	.65
20	1.5	1.8	1.65	.85	.2	.55	1.9	−.25	− .65	− .55	.5	.65
21	1.25	1.6	1.45	.75	.15	1.6	1.65	− .3	− .5	− .55	.4	.6
22	1.8	1.45	1.35	.75	.2	.45	1.9	− .3	− .15	− .5	.4	.55
23	6.3	1.55	1.4	.65	.2	.5	2.45	− .3	+ .4	− .23	.3	.5
24	9.8	1.6	1.45	.7	1.1	.3	2.4	− .3	.6	− .05	.25	.5
25	9.95	1.5	1.4	.65	1.55	.2	1.5	+1.0	− .1	+ .05	.2	.45
26	5.1	1.4	1.35	6.5	.65	−.1	1.3	− .1	− .4	.1	.2	.45
27	3.55	1.35	1.25	1.4	.85	+.45	.9	− .3	− .4	.15	.2	.4
28	2.65	1.3	1.2	1.7	.65	−.1	.8	− .3	+ .2	.25	.2	.35
29	2.3	1.55	1.15	1.15	.95	−.2	.8	− .3	.45	.9	.2	.35
30	2.1	.....	1.2	.85	.4	−.25	.8	− .35	.3	.65	.2	.3
31	1.8	.....	1.2	.....	.85	.....	.5	− .4	.....	.5	.....	.25
1897												
1	.2	3.1	2.0	2.8	4.1	1.0	.5	.85	.5	− .5	.0	1.1
2	.2	4.5	1.8	4.1	3.2	1.0	.45	.8	.35	− .5	.35	.85
3	.2	4.9	1.8	5.0	2.8	1.15	.55	.9	.1	− .5	.35	1.2
4	.3	3.25	2.0	7.0	2.5	1.35	.55	.8	.2	− .45	.95	1.9
5	.4	3.7	1.9	12.8	2.4	1.15	1.15	.7	.1	− .5	.35	2.65
6	.4	4.1	9.0	17.0	2.25	1.05	.65	.65	.0	− .5	.3	2.6
7	.35	5.5	9.2	8.0	2.15	1.0	2.5	1.6	.0	− .5	.15	1.5
8	.35	5.0	5.5	5.4	2.05	.35	1.8	1.35	− .05	− .4	.15	1.1
9	.3	3.1	4.45	6.0	2.0	1.1	1.32	1.4	− .15	− .45	.1	.75
10	.3	2.4	4.05	5.0	1.95	1.0	2.45	1.2	− .15	− .45	.15	.6
11	.2	3.4	3.6	4.6	1.9	1.0	2.45	.95	− .2	+1.35	.1	.55
12	.2	4.0	6.4	4.1	1.9	.85	1.6	.8	− .2	1.5	.05	.5
13	.4	5.3	12.6	4.0	1.85	.75	1.2	.65	− .15	1.4	.0	.5
14	3.0	4.0	10.0	4.55	1.9	.65	.85	.5	− .2	− .35	−.05	1.75
15	3.7	2.6	8.4	4.05	2.35	.55	.6	.45	− .25	+ .15	−.1	1.8
16	2.8	2.6	6.8	4.0	1.85	.5	.5	.4	− .25	.0	−.05	1.9
17	2.4	2.4	5.45	3.5	1.7	1.55	4.2	2.9	− .3	− .05	+.1	1.65
18	4.0	2.1	6.1	2.2	1.5	1.0	2.45	1.25	− .3	− .15	−.05	1.15
19	4.6	1.9	5.8	3.05	1.45	1.05	7.65	.95	− .3	− .15	−.05	.65
20	5.5	2.5	5.55	3.0	1.35	.55	12.3	.65	− .35	.0	−.05	.75

Daily gage height, in feet, of Chattahoochee River at Oakdale—Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897												
21	7.5	2.5	5.0	2.8	1.35	1.35	10.3	0.55	—0.35	1.45	—0.05	0.95
22	6.85	2.9	4.3	2.75	1.4	.75	6.1	1.15	— .35	.85	— .05	1.95
23	3.9	5.1	4.5	2.7	1.4	.55	4.35	1.1	— .35	.15	— .05	2.95
24	3.2	4.5	4.0	2.7	1.35	.45	2.2	1.0	— .3	.0	— .1	1.75
25	2.0	3.6	3.9	2.65	1.3	.9	1.65	.6	— .25	.05	— .1	1.7
26	1.65	2.9	3.35	2.6	1.2	.55	2.85	.5	— .3	.05	— .1	2.25
27	.45	2.4	3.1	2.4	1.1	.45	2.3	.25	— .35	— .05	+ .5	1.95
28	1.1	2.05	3.0	2.1	1.05	.3	1.35	.2	— .35	— .05	1.35	1.85
29	1.25	.....	2.75	2.0	1.0	1.0	1.2	.2	— .35	— .05	1.85	1.35
30	1.5	.....	2.7	2.2	1.05	.75	1.1	.15	— .4	— .1	1.5	2.05
31	2.0	.....	2.15	.....	1.1	.....	.95	1.65	.....	— .1	.....	.95
1898												
1	.75	1.5	.4	5.5	1.85	.25	*a* .95	*a*2.3	*a* 3.1	*a* 2.4	*a* 3.1	*a*3.7
2	.55	1.3	.4	3.45	1.6	.3	1.1	2.0	20.0	2.5	3.0	3.4
3	.55	1.05	.55	2.6	1.55	.25	.75	1.9	27.75	2.9	2.9	3.6
4	.5	1.0	.8	3.05	1.45	.2	.7	8.5	27.0	15.0	3.0	4.1
5	.55	.95	.85	8.7	1.35	.09	1.4	14.0	22.0	19.25	3.1	5.5
6	.55	1.0	.7	11.15	1.2	.03	1.1	16.0	15.0	23.5	3.8	4.75
7	.55	.95	.55	5.8	1.2	.0	1.85	9.0	12.0	16.25	3.5	4.1
8	.6	.8	.45	3.8	1.1	— .05	3.7	6.0	7.5	7.5	3.3	3.75
9	.65	.75	.35	2.95	1.1	— .02	5.1	3.8	5.5	6.5	2.9	3.4
10	.55	.7	.3	2.35	.9	— .1	4.75	4.3	5.1	5.5	2.8	3.1
11	.55	.7	.3	2.3	.9	— .13	3.5	4.5	4.75	4.9	3.1	3.0
12	.55	.7	.3	2.0	.9	— .2	2.3	5.8	4.4	4.5	3.8	3.3
13	.85	.65	.3	1.75	1.2	.0	1.85	4.1	4.2	4.3	3.1	3.1
14	1.25	.65	.5	1.75	.95	.13	2.5	7.5	3.9	4.0	3.6	2.95
15	1.0	.55	1.05	1.9	.85	.08	4.2	5.5	3.75	3.9	4.1	2.9
16	.85	.55	1.4	1.6	.8	.93	4.1	2.9	3.6	3.7	3.6	2.8
17	.8	.45	3.5	1.45	.7	— .05	2.5	2.85	3.4	3.5	3.7	2.75
18	.75	.6	1.75	1.3	.65	+1.5	1.85	2.4	3.3	5.7	4.05	2.85
19	.75	.9	1.5	1.15	.6	1.65	1.75	2.9	3.2	7.9	4.75	2.95
20	.9	1.05	1.05	1.2	.6	1.53	1.5	6.0	3.1	4.7	5.1	3.25
21	1.5	.75	.85	1.4	.6	1.75	1.4	6.5	3.3	4.3	4.5	3.95
22	2.3	.75	.75	1.35	.55	.35	1.45	4.5	2.9	4.9	3.75	3.5
23	1.5	.55	.55	1.4	1.2	.1	1.5	3.9	3.1	5.3	3.5	7.1
24	1.35	.55	.45	3.65	1.15	— .05	12.4	2.8	5.3	4.1	4.75	8.5
25	2.95	.45	.4	4.55	1.25	— .15	6.3	2.75	3.25	3.8	3.75	5.75
26	7.7	.4	.4	2.65	.8	— .15	3.4	2.9	2.95	3.5	3.5	4.1
27	6.8	.45	.4	2.25	.8	— .2	3.8	7.5	2.8	3.4	3.3	3.75
28	5.05	.6	1.15	2.35	.6	— .05	6.4	4.3	2.7	3.45	3.1	3.5
29	4.35	.....	2.5	2.35	.3	— .07	5.85	2.8	2.6	3.3	3.75	2.95
30	3.05	.....	6.3	1.85	.3	— .1	4.4	3.2	2.5	3.45	4.05	2.75
31	2.7	.....	8.4	.....	.25	.....	3.75	3.2	.....	3.3	.....	3.1
1899												
1	*b*4.25	*b*5.1	*b*9.8	*b*13.0	*b*4.7	2.45	1.5	1.7	4.6	.4	.6	1.3
2	4.75	4.5	6.85	7.75	4.45	2.4	1.4	1.4	2.7	.1	.5	1.8
3	3.6	5.8	6.17	6.5	4.4	2.3	1.35	1.2	2.1	.1	.5	1.5
4	3.4	4.9	5.9	7.75	4.35	2.1	1.25	1.1	1.9	.1	.5	1.4
5	3.1	6.5	8.1	6.5	4.5	2.05	1.2	1.1	1.6	.4	.5	1.1
6	3.75	10.0	8.5	5.9	5.1	2.0	1.4	1.0	1.0	.6	.4	.9
7	6.75	16.0	6.4	6.5	4.6	2.0	1.4	.9	.9	1.6	.4	.8
8	6.1	21.5	5.9	7.75	4.35	2.05	1.4	.8	.8	1.5	.4	.8
9	5.25	13.4	5.5	7.5	4.25	2.05	1.4	.7	.7	2.0	.4	.8
10	4.7	9.5	5.25	7.1	4.1	2.1	1.3	.6	.7	1.2	.4	.8
11	6.3	6.4	5.1	6.8	4.0	2.15	1.3	.6	3.0	.9	.4	.7
12	4.75	5.5	5.0	5.75	3.95	2.75	1.1	.5	1.1	.7	.7	2.2
13	4.25	4.9	4.95	5.25	3.9	4.8	1.1	.5	.9	.7	.5	6.4
14	4.5	4.1	6.25	5.2	3.85	4.0	.9	.5	.8	.7	.5	3.1
15	5.5	4.6	10.0	5.1	3.8	2.9	.8	.5	.7	.6	.5	2.4
16	4.9	5.6	21.5	5.0	3.7	2.25	.8	.6	.6	.5	.6	1.8
17	4.75	7.25	24.25	5.25	3.6	2.05	.8	.6	.5	.5	.6	1.6
18	4.5	6.1	11.0	4.95	3.5	2.05	1.0	.6	.3	.6	.5	1.3
19	4.1	5.6	10.5	5.0	3.55	2.0	1.3	.5	.4	.6	.5	1.1
20	3.9	4.9	15.0	4.95	3.5	1.9	1.0	.4	.4	.8	.4	1.2

a Gage heights July 1 to December 31, 1898, were recorded from "Oakdale lower gage" at Mason and Turners Ferry.

b Gage heights January 1 to May 31, 1899, were recorded from "Oakdale lower gage" at Mason and Turners Ferry.

Daily gage height, in feet, of Chattahoochee River at Oakdale—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1899												
21	3.75	5.25	8.75	4.85	3.45	1.75	1.35	0.4	0.4	0.9	0.4	1.1
22	3.6	5.2	7.25	4.65	5.5	1.7	3.8	.4	.4	.7	.9	1.1
23	3.9	5.0	9.5	4.75	3.6	1.55	2.8	.3	.3	.6	2.0	3.4
24	4.25	4.9	9.0	4.95	3.5	1.55	1.9	.2	.3	.5	2.4	5.5
25	4.1	4.6	6.5	7.25	3.35	1.8	.8	.1	.3	.5	1.7	4.6
26	4.25	10.28	7.1	8.0	3.25	2.05	2.1	.2	.3	.4	3.0	3.4
27	3.7	22.13	6.2	6.25	3.15	2.2	2.1	5.2	.2	.5	2.8	2.4
28	3.45	18.88	6.1	5.25	3.1	2.0	5.9	3.4	.2	.5	2.7	2.0
29	3.25	.....	7.9	5.0	3.2	1.8	3.4	1.4	.2	.9	2.1	2.1
30	3.5	.....	6.45	4.8	6.1	1.6	3.3	3.2	.2	.7	1.8	1.8
31	4.65	.....	12.3	.....	3.4	.....	3.2	2.8	.....	.6	.....	1.7
1900												
1	1.0	1.0	4.5	3.4	5.0	3.0	5.0	5.0	2.0	2.1	2.4	2.2
2	.7	1.0	5.9	3.1	4.8	3.7	4.5	4.5	2.0	2.1	2.4	2.2
3	.5	.9	4.3	3.0	4.5	4.0	6.0	4.0	2.0	2.1	3.0	2.1
4	.5	.9	3.6	2.7	4.0	4.7	7.5	4.0	1.9	3.0	2.8	2.3
5	.9	2.9	3.3	2.7	3.9	4.0	7.0	4.0	1.7	3.4	2.7	4.1
6	1.2	3.5	3.1	2.8	3.0	3.8	6.5	3.5	1.8	3.8	2.5	4.0
7	1.3	2.2	3.0	2.8	3.0	4.7	6.4	3.5	1.8	4.0	2.5	4.0
8	1.3	1.9	8.8	2.7	3.0	9.7	6.0	3.5	1.8	4.0	2.5	3.8
9	1.2	3.8	7.9	2.7	2.9	10.5	5.8	3.0	1.7	3.9	2.4	3.7
10	1.1	4.3	6.9	2.6	2.9	8.0	5.7	3.0	1.7	3.5	2.4	3.5
11	2.0	7.4	5.5	3.0	2.8	5.0	5.6	3.0	1.5	3.5	2.4	2.1
12	3.9	8.0	4.0	6.4	2.7	4.0	5.4	3.0	1.5	3.9	2.4	2.0
13	3.0	15.5	3.1	5.4	2.7	4.5	5.2	3.0	4.3	4.3	2.3	2.0
14	2.8	20.7	3.2	4.2	2.6	4.0	5.0	3.0	8.4	4.2	2.2	2.3
15	2.2	16.4	3.0	3.8	2.6	3.5	4.5	3.0	10.2	4.0	2.1	2.3
16	1.9	6.0	5.0	3.3	2.6	3.0	4.4	2.7	8.2	3.6	2.1	2.2
17	1.7	4.8	3.6	4.0	2.5	3.5	4.3	3.0	6.0	3.4	2.0	2.1
18	1.8	3.8	3.0	6.9	3.5	4.5	4.2	4.0	3.1	3.2	2.0	2.1
19	2.9	3.5	4.5	9.0	3.7	6.0	4.1	3.5	3.0	3.0	1.8	2.0
20	4.0	3.1	5.9	7.3	3.0	6.5	4.0	3.5	2.8	3.0	1.5	2.3
21	5.8	3.0	6.6	6.3	3.1	8.0	3.9	3.0	2.8	2.8	1.5	2.6
22	4.8	4.2	4.8	7.0	3.2	9.0	3.8	3.0	2.7	3.0	1.8	2.8
23	2.9	4.3	4.1	6.3	3.7	13.6	3.7	3.0	2.5	3.3	2.0	2.7
24	3.0	3.8	3.5	13.6	3.9	18.0	3.7	3.0	2.3	3.3	1.9	3.0
25	2.6	4.1	7.7	7.5	3.7	17.5	4.0	2.7	2.3	3.0	1.8	2.8
26	1.9	4.0	7.5	6.0	3.5	11.4	5.0	2.7	2.0	3.0	1.8	2.7
27	1.7	3.3	6.0	5.5	3.4	10.5	6.0	2.6	2.0	2.9	5.6	2.5
28	1.5	3.0	4.5	5.0	3.2	7.5	6.5	2.5	1.8	2.8	3.3	2.3
29	1.5	.....	4.0	5.0	3.0	6.0	7.4	3.0	1.5	2.6	2.3	2.3
30	1.4	.....	3.8	5.0	2.5	5.5	10.0	3.0	1.5	2.4	2.0	3.0
31	1.3	.....	3.5	.....	2.4	.....	6.0	2.7	.....	2.4	.....	3.8
1901												
1	2.1	4.3	2.4	4.5	3.1	6.8	4.7	2.6	6.0	3.7	1.7	1.6
2	2.3	4.4	2.4	4.5	3.1	6.6	4.1	2.3	5.0	4.6	1.7	1.6
3	2.3	5.0	2.3	4.7	3.1	6.0	3.9	2.1	4.8	4.2	1.6	1.8
4	2.2	5.2	2.3	4.5	3.0	6.0	3.0	1.9	4.6	3.9	1.8	1.8
5	2.2	5.0	2.3	4.3	3.0	5.3	2.9	1.8	4.4	3.6	1.8	1.7
6	2.2	4.7	2.1	4.0	2.9	4.7	2.8	2.2	4.0	3.1	1.8	1.8
7	2.1	4.1	2.1	4.0	2.9	4.3	2.8	9.9	3.7	2.9	1.7	1.8
8	2.1	4.0	2.1	3.7	3.0	4.0	2.7	3.2	3.6	2.8	1.7	1.7
9	2.5	4.2	2.2	3.7	3.0	3.6	2.7	3.0	3.6	2.8	1.7	1.7
10	3.0	4.1	3.3	3.7	3.0	3.4	2.6	2.9	3.6	2.7	1.7	1.7
11	9.0	4.0	6.5	3.7	3.0	3.2	2.6	5.7	3.8	2.7	1.7	1.7
12	19.9	3.6	5.5	6.4	3.0	3.4	2.5	4.0	3.7	2.7	1.6	1.7
13	22.0	3.2	4.4	12.0	3.1	3.8	2.2	4.2	3.6	3.8	1.6	1.6
14	16.0	3.1	3.4	9.5	3.0	5.1	2.1	4.4	3.9	3.2	1.6	1.8
15	8.4	3.0	3.2	7.0	3.0	10.0	2.1	5.6	3.7	2.9	1.6	2.6
16	5.1	2.9	3.2	5.3	2.9	9.8	2.2	9.8	3.7	2.8	1.7	2.0
17	4.4	2.9	3.0	5.0	2.8	8.3	9.1	10.5	3.8	2.8	1.6	1.8
18	4.0	2.8	3.0	6.1	2.8	7.1	5.0	9.3	14.6	2.8	1.6	1.7
19	4.0	2.8	3.0	7.7	2.7	4.2	3.9	9.2	7.2	2.7	1.7	1.7
20	3.8	2.7	3.0	7.0	3.2	3.9	9.0	9.8	4.3	2.7	1.9	1.7

Daily gage height, in feet, of Chattahoochee River at Oakdale—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1901												
21	3.7	2.7	3.2	5.8	7.1	3.7	4.2	10.8	3.9	2.7	1.8	1.7
22	3.7	2.6	3.2	6.0	18.7	3.5	3.0	17.5	3.9	2.5	1.7	1.7
23	3.4	2.6	3.1	5.4	20.0	3.4	2.9	19.8	3.8	2.3	1.8	1.7
24	3.7	2.5	3.2	5.1	7.8	3.2	2.7	16.4	3.8	2.1	1.8	1.9
25	3.8	2.5	5.3	4.8	6.0	3.2	2.6	10.3	3.6	2.0	1.8	1.8
26	3.5	2.5	10.5	4.8	5.2	4.9	2.4	10.1	3.4	2.0	1.8	1.8
27	3.6	2.4	23.5	4.5	4.0	4.2	2.8	9.8	3.1	1.8	1.7	1.8
28	3.4	2.4	17.0	4.2	3.7	3.9	2.6	9.1	2.9	1.7	1.7	2.4
29	3.1	.....	9.5	3.5	3.1	3.9	2.7	8.7	3.2	1.7	1.7	22.0
30	4.6	.....	7.3	3.1	3.1	3.8	3.1	6.8	3.6	1.7	1.6	27.0
31	4.3	.....	5.0	.....	7.1	.....	3.0	6.6	.....	1.7	.....	25.0
1902												
1	9.2	7.2	25.0	7.1	3.4	3.2	2.6	2.1	2.4	2.1	.8	2.4
2	6.0	18.0	20.8	6.4	3.8	3.1	2.6	1.9	2.1	1.5	.7	2.6
3	5.1	19.2	10.3	6.2	3.8	3.1	3.4	1.8	2.1	1.6	.7	7.0
4	4.2	8.6	7.1	5.8	3.6	3.0	2.8	1.8	2.1	1.8	.5	8.6
5	3.7	6.0	7.8	5.2	3.6	2.8	2.6	1.8	2.4	1.5	.5	4.9
6	3.2	4.3	6.0	4.8	3.6	2.8	2.4	1.8	2.3	1.6	.7	4.1
7	3.1	3.2	5.2	4.9	3.6	2.8	2.4	1.9	2.1	2.1	.9	3.3
8	2.8	2.8	4.6	4.9	3.5	2.8	2.1	1.9	2.0	1.8	.8	2.4
9	2.5	2.8	4.4	5.0	3.5	2.8	2.1	1.8	3.5	1.6	1.0	1.9
10	2.3	2.7	4.1	4.4	3.5	2.7	1.8	1.8	3.2	1.5	1.2	1.8
11	2.3	2.7	3.8	4.2	3.6	2.7	1.8	1.9	2.8	1.4	1.3	1.6
12	2.3	2.8	3.6	4.2	3.8	2.7	3.6	1.8	2.3	1.8	1.0	1.6
13	2.3	2.8	5.5	3.8	3.6	2.7	2.4	1.8	2.3	2.1	.9	1.8
14	2.1	2.8	4.8	3.8	3.6	2.6	2.2	1.8	4.8	1.9	.7	1.6
15	2.1	2.8	5.7	3.8	3.6	2.8	2.6	1.7	3.5	1.4	.6	1.7
16	2.1	3.0	11.4	3.6	3.8	5.6	2.4	1.7	2.8	1.6	.8	5.4
17	2.1	3.2	8.0	3.8	3.8	4.2	2.2	1.7	2.4	1.2	.9	7.0
18	2.1	3.1	6.2	4.1	3.8	3.4	2.1	1.7	2.4	1.4	1.3	6.0
19	2.3	2.8	5.6	4.1	3.8	4.0	1.8	1.7	2.6	1.5	1.0	4.0
20	2.2	2.8	4.8	3.8	3.5	3.6	1.8	1.8	2.6	1.6	1.1	2.7
21	2.6	3.0	4.6	3.8	3.5	4.1	2.2	1.8	2.6	1.2	1.0	3.0
22	2.6	3.0	4.4	3.8	3.5	4.4	2.0	1.8	2.4	1.0	.8	2.9
23	2.5	2.8	4.1	3.8	3.4	4.2	1.9	1.6	2.1	.8	.8	2.4
24	2.4	2.8	4.1	3.6	3.2	4.2	1.8	1.6	2.1	.7	.9	2.0
25	2.4	3.6	3.8	3.6	3.2	3.8	1.8	1.6	5.7	.5	1.0	1.8
26	2.4	3.6	3.8	3.6	3.2	3.8	1.8	1.6	5.8	.8	4.8	1.7
27	2.4	3.8	4.2	3.6	3.2	3.0	1.8	1.5	4.6	.9	4.3	1.6
28	2.8	23.2	6.4	3.6	3.2	2.8	2.6	1.8	7.9	1.0	3.6	1.7
29	3.1	.....	21.0	3.4	3.1	2.8	2.7	2.7	5.2	.9	1.9	2.0
30	4.0	.....	21.7	3.5	3.1	2.8	2.5	2.6	3.1	.7	1.6	3.4
31	4.6	.....	9.8	.....	3.1	.....	2.1	2.4	.....	.5	.....	3.0

Day	Jan.	Feb.	Mar.	Nov.	Dec.	Day	Jan.	Feb.	Mar.	Nov.	Dec.
1903						1903					
1	2.6	3.0	19.4	1.0	1.0	17	2.5	24.0	5.9	1.3	1.3
2	2.8	2.9	12.0	.....	1.0	18	2.4	25.6	4.8	1.7	1.3
3	3.1	3.4	7.2	1.5	1.0	19	2.2	9.4	4.6	1.5	1.3
4	2.8	7.6	6.6	2.0	1.0	20	2.1	4.9	5.0	1.5	1.5
5	2.5	10.2	5.8	2.0	1.0	21	2.0	2.7	11.4	1.5	1.6
6	2.4	6.7	6.4	3.0	1.0	22	2.0	3.0	13.0	1.3	1.6
7	2.6	7.7	5.8	2.0	1.0	23	1.9	3.2	21.0	1.5	1.5
8	2.8	18.0	5.8	1.5	1.0	24	2.2	3.7	23.4	1.2	1.5
9	2.7	15.6	5.5	1.5	1.0	25	2.5	4.1	22.4	1.1	1.5
10	2.5	7.8	7.4	1.3	1.2	26	2.4	3.7	8.8	1.2	1.7
11	3.3	11.0	12.4	1 3	1.2	27	2.0	4.2	7.5	1.0	1 7
12	4.0	16.0	15.0	1.5	1.0	28	2.3	11.4	6.8	1.0	1.5
13	4.9	10.6	11.4	1.4	1.3	29	2.7	.....	10.8	1.0	1.5
14	3.8	4.7	7.7	1.3	1.5	30	4.5	.....	16.6	1.0	1.4
15	3.2	5.8	6.8	1.2	1.5	31	3.4	.....	15.8	.....	1.3
16	2.8	5.8	6.0	1.2	1 3						

Daily gage height, in feet, of Chattahoochee River at Oakdale—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	Day	Jan.	Feb.	Mar.	Apr.	May
1904						1904					
1	1.3	1.6	2.0	2.0	1.5	17	1.7	1.6	2.5	2.0	1.5
2	1.3	1.5	2.3	2.0	1.5	18	1.5	1.6	2.0	2.0	1.5
3	1.7	1.7	2.4	1.9	1.4	19	1.9	1.7	2.0	1.8	1.4
4	1.3	1.5	2.4	1.8	1.4	20	1.6	2.5	2.0	1.7	1.3
5	1.3	1.5	2.0	1.8	1.4	21	1.5	2.7	1.8	1.7	1.3
6	1.3	1.5	2.3	1.5	1.4	22	1.7	4.5	2.0	1.7	1.0
7	1.4	1.6	4.5	1.7	1.4	23	4.0	7.7	3.8	1.7	1.0
8	1.4	3.6	8.2	2.5	1.3	24	4.0	4.3	4.0	1.5	1.0
9	1.3	3.0	4.0	3.0	4.0	25	3.5	3.5	4.4	1.5	1.0
10	1.4	3.6	3.0	5.0	4.5	26	3.0	3.0	4.0	1.5	.8
11	1.4	4.0	2.8	3.0	2.7	27	3.0	2.8	3.0	1.7	.8
12	1.3	2.7	2.5	2.5	2.0	28	3.0	2.4	2.6	1.7	.8
13	1.5	2.0	2.2	2.2	1.8	29	3.5	2.0	2.3	1.5	.8
14	1.6	1.8	2.5	2.0	1.7	30	3.6	.....	2.0	1.5	1.0
15	1.5	2.0	4.5	1.9	1.7	31	1.6	.....	1.8	.....	1.7
16	1.5	1.9	3.0	1.9	1.7						

Rating tables for Chattahoochee River at Oakdale.

OCTOBER 15, 1895, TO DECEMBER 31, 1896.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
—0.60	760	0.70	1,356	2.00	2,155	3.30	3,223
— .50	790	.80	1,412	2.10	2,227	3.40	3,315
— .40	821	.90	1,469	2.20	2,301	3.50	3,410
— .30	856	1.00	1,528	2.30	2,377	3.60	3,508
— .20	895	1.10	1,586	2.40	2,455	3.70	3,608
— .10	938	1.20	1,646	2.50	2,535	3.80	3,711
.00	985	1.30	1,707	2.60	2,616	3.90	3,817
.10	1,035	1.40	1,769	2.70	2,698	4.00	3,928
.20	1,086	1.50	1,832	2.80	2,782	4.20	4,154
.30	1,138	1.60	1,896	2.90	2,868	4.40	4,391
.40	1,191	1.70	1,961	3.00	2,956	4.60	4,640
.50	1,245	1.80	2,027	3.10	3,044	4.80	4,899
.60	1,300	1.90	2,085	3.20	3,133	5.00	5,170

JANUARY 1 TO DECEMBER 31, 1897.[b]

—0.50	675	1.50	1,855	4.00	4,340	8.00	9,740
— .40	725	1.60	1,927	4.20	4,610	8.20	10,010
— .30	775	1.70	2,000	4.40	4,880	8.40	10,280
— .20	825	1.80	2,075	4.60	5,150	8.60	10,550
— .10	876	1.90	2,150	4.80	5,420	8.80	10,820
.00	928	2.00	2,226	5.00	5,690	9.00	11,090
.10	980	2.10	2,303	5.20	5,960	9.20	11,360
.20	1,035	2.20	2,380	5.40	6,230	9.40	11,630
.30	1,091	2.30	2,460	5.60	6,500	9.60	11,900
.40	1,148	2.40	2,540	5.80	6,770	9.80	12,170
.50	1,206	2.50	2,620	6.00	7,040	10.00	12,440
.60	1,266	2.60	2,702	6.20	7,310	11.00	13,790
.70	1,326	2.70	2,785	6.40	7,580	12.00	15,140
.80	1,388	2.80	2,870	6.60	7,850	13.00	16,490
.90	1,450	2.90	2,965	6.80	8,120	14.00	17,840
1.00	1,515	3.00	3,060	7.00	8,390	15.00	19,190
1.10	1,580	3.20	3,275	7.20	8,660	16.00	20,540
1.20	1,647	3.40	3,530	7.40	8,930	17.00	21,890
1.30	1,715	3.60	3,800	7.60	9,200		
1.40	1,785	3.80	4,070	7.80	9,470		

a Discharge estimated above gage height, 5.0 feet.

b Above gage height 3.40 the rating curve is a tangent, the difference being 135 per tenth.

Rating tables for Chattahoochee River at Oakdale—Continued.

JANUARY 1 TO JUNE 30, 1898.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
— 0.20	920	1.80	2,130	3.80	3,830	7.60	9,000
— .10	970	1.90	2,200	3.90	3,930	7.80	9,800
.00	1,020	2.00	2,270	4.00	4,030	8.00	9,600
.10	1,075	2.10	2,345	4.20	4,250	8.50	10,350
.20	1,130	2.20	2,420	4.40	4,470	9.00	11,100
.30	1,185	2.30	2,495	4.60	4,690	9.50	11,850
.40	1,240	2.40	2,570	4.80	4,920	10.00	12,600
.50	1,295	2.50	2,650	5.00	5,160	10.50	13,350
.60	1,350	2.60	2,730	5.20	5,420	11.00	14,100
.70	1,405	2.70	2,815	5.40	5,700	12.00	15,600
.80	1,470	2.80	2,900	5.60	6,000	13.00	17,100
.90	1,530	2.90	2,985	5.80	6,300	14.00	18,600
1.00	1,590	3.00	3,070	6.00	6,600	15.00	20,100
1.10	1,650	3.10	3,160	6.20	6,900	16.00	21,600
1.20	1,720	3.20	3,250	6.40	7,200	17.00	23,100
1.30	1,785	3.30	3,340	6.60	7,500	18.00	24,600
1.40	1,850	3.40	3,430	6.80	7,800	19.00	26,100
1.50	1,920	3.50	3,530	7.00	8,100	20.00	27,600
1.60	1,990	3.60	3,630	7.20	8,400		
1.70	2,060	3.70	3,730	7.40	8,700		

JULY 1, 1898, TO MAY 31, 1899.[b]

0.70	730	3.80	3,050	7.20	7,260	13.00	14,800
.80	780	4.00	3,250	7.40	7,520	14.00	16,100
.90	840	4.20	3,450	7.60	7,780	15.00	17,400
1.00	900	4.40	3,650	7.80	8,040	16.00	18,700
1.20	1,020	4.60	3,900	8.00	8,300	17.00	20,000
1.40	1,150	4.80	4,150	8.20	8,560	18.00	21,300
1.60	1,280	5.00	4,400	8.40	8,820	19.00	22,600
1.80	1,420	5.20	4,660	8.60	9,080	20.00	23,900
2.00	1,560	5.40	4,920	8.80	9,340	21.00	25,200
2.20	1,700	5.60	5,180	9.00	9,600	22.00	26,500
2.40	1,850	5.80	5,440	9.20	9,860	23.00	27,800
2.60	2,000	6.00	5,700	9.40	10,120	24.00	29,100
2.80	2,150	6.20	5,960	9.60	10,380	25.00	30,400
3.00	2,300	6.40	6,220	9.80	10,640	26.00	31,700
3.20	2,470	6.60	6,480	10.00	10,900	27.00	33,000
3.40	2,650	6.80	6,740	11.00	12,200	28.00	34,300
3.60	2,850	7.00	7,000	12.00	13,500		

JUNE 1, 1899, TO DECEMBER 31, 1900.[c]

0.10	870	1.30	1,560	2.50	2,540	3.70	3,720
.20	910	1.40	1,630	2.60	2,630	3.80	3,825
.30	960	1.50	1,700	2.70	2,720	3.90	3,930
.40	1,000	1.60	1,780	2.80	2,810	4.00	4,035
.50	1,050	1.70	1,860	2.90	2,905	4.20	4,250
.60	1,100	1.80	1,940	3.00	3,000	4.40	4,470
.70	1,160	1.90	2,020	3.10	3,100	4.60	4,700
.80	1,220	2.00	2,100	3.20	3,200	4.80	4,930
.90	1,280	2.10	2,185	3.30	3,300	5.00	5,160
1.00	1,350	2.20	2,270	3.40	3,405		
1.10	1,420	2.30	2,360	3.50	3,510		
1.20	1,490	2.40	2,450	3.60	3,615		

a Above gage height 5.40 the rating curve is a tangent, the difference being 150 per tenth.

b Applies only to the gage heights recorded from the lower gage at Mason and Turners Ferry. Above 5.0 feet the rating curve is a tangent, the difference being 130 per tenth.

c Above gage height 5.0 feet the above table is the same as the table used from January 1 to June 30, 1898.

Rating tables for Chattahoochee River at Oakdale—Continued.

JANUARY 1 TO DECEMBER 31, 1901.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.60	1,690	3.50	3,210	5.40	5,256	8.60	8,904
1.70	1,758	3.60	3,305	5.50	5,370	8.80	9,122
1.80	1,827	3.70	3,402	5.60	5,484	9.00	9,360
1.90	1,898	3.80	3,500	5.70	5,598	9.20	9,588
2.00	1,970	3.90	3,600	5.80	5,712	9.40	9,816
2.10	2,044	4.00	3,702	5.90	5,826	9 60	10,044
2.20	2,119	4.10	3,805	6.00	5,940	8.80	10,272
2.30	2,195	4.20	3,909	6.20	6,168	10.00	10,500
2.40	2,272	4.30	4,014	6.40	6,396	10.50	11,070
2.50	2,350	4.40	4,121	6.60	6,624	11.00	11,640
2.60	2,430	4.50	4,230	6 80	6,852	11.50	12,210
2.70	2,511	4.60	4,344	7.00	7,080	12.00	12,780
2.80	2,593	4.70	4,458	7.20	7,308	12.50	13,350
2.90	2,676	4.80	4,572	7.40	7,536	13.00	13,920
3.00	2,760	4.90	4,686	7.60	7,764	13.50	14,490
3.10	2,846	5.00	4,800	7.80	7,992	14.00	15,060
3.20	2,934	5.10	4,914	8.00	8,220	14.50	15,630
3.30	3,024	5.20	5,028	8.20	8,448		
3.40	3,116	5.30	5,142	8.40	8,676		

JANUARY I TO DECEMBER 31, 1902.[b]

0.50	950	1.60	1,620	2.70	2,415	3.80	3,450
.60	1,005	1.70	1,685	2.80	2,500	3.90	3,555
.70	1,060	1.80	1,750	2.90	2,585	4.00	3,665
.80	1,120	1.90	1,820	3.00	2,675	4.10	3,775
.90	1,180	2.00	1,890	3.10	2,765	4.20	3,885
1.00	1,240	2.10	1,960	3.20	2,855	4.30	4,000
1.10	1,300	2.20	2,030	3.30	2,950	4.40	4,115
1.20	1,360	2.30	2,105	3.40	3,045	4.50	4,230
1.30	1,425	2.40	2,180	3.50	3,145		
1.40	1,490	2.50	2,255	3.60	3,245		
1.50	1,555	2.60	2,335	3.70	3,345		

JANUARY I, 1903, TO DECEMBER 31, 1904.

0.80	1,180	2.30	2,170	3.80	3,450	11.00	11,340
.90	1,240	2.40	2,245	3.90	3,545	12.00	12,540
1.00	1,300	2.50	2,320	4.00	3,640	13.00	13,840
1.10	1,360	2.60	2,400	4.50	4,140	14.00	15,140
1.20	1,420	2.70	2,480	5.00	4,640	15.00	16,540
1.30	1,480	2.80	2,560	5.50	5,140	16.00	17,940
1.40	1,545	2.90	2,645	6.00	5,640	17.00	19,400
1.50	1,610	3.00	2,730	6.50	6,190	18.00	20,960
1.60	1,675	3.10	2,815	7.00	6,740	19.00	22,800
1.70	1,740	3.20	2,900	7.50	7,290	20.00	25,000
1.80	1,810	3.30	2,990	8.00	7,840	21.00	27,800
1.90	1,880	3.40	3,080	8.50	8,390	22.00	31,800
2.00	1,950	3.50	3,170	9.00	8,940	23.00	34,800
2.10	2,020	3.60	3,260	9.50	9,540	24.00	38,300
2.20	2,096	3.70	3,355	10.00	10,140	25.00	41,800

a Between gage heights 4.50 and 14.0 feet the rating curve is a tangent, the difference being 114 per tenth. Above gage height 14.0 feet the 1904 rating curve has been used to obtain revised estimates for 1901.

b Between gage heights 4.5 and 14.0 feet the above table is the same as the 1901 table. Above gage height 14.0 feet the 1904 rating curve has been used to obtain revised estimates for 1902.

Estimated monthly discharge of Chattahoochee River at Oakdale.

[Drainage area, 1,560 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1895					
October 15-31	1,180	970	1,038	0.67	0.43
November	1,961	1,130	1,298	.83	.92
December	2,911	1,140	1,432	.92	1.06
1896					
January	12,000	1,356	2,821	1.81	2.09
February	7,400	1,707	2,767	1.77	1.90
March	2,120	1,586	1,790	1.15	1.33
April	2,740	1,328	1,599	1.02	1.14
May	3,088	1,060	1,384	.89	1.02
June	2,227	875	1,272	.82	.91
July	24,600	821	3,891	2.50	2.89
August	1,961	821	1,075	.69	.79
September	1,300	745	850	.54	.60
October	1,469	775	913	.58	.67
November	4,640	1,086	1,608	1.03	1.15
December	3,133	1,112	1,454	.93	1.07
The year	24,600	745	1,785	1.14	15.56
1897					
January	9,065	1,035	2,575	1.65	1.90
February	6,365	2,150	3,734	2.39	2.49
March	15,950	2,075	5,658	3.63	4.19
April	21,890	2,226	5,147	3.30	3.68
May	4,475	1,515	2,130	1.37	1.58
June	1,891	1,091	1,438	.92	1.02
July	15,545	1,177	3,360	2.15	2.48
August	2,965	1,007	1,452	.93	1.07
September	1,206	725	845	.54	.60
October	1,355	675	979	.63	.72
November	2,113	876	1,078	.69	.77
December	3,013	1,206	1,845	1.18	1.36
The year	21,890	675	2,520	1.62	21.86
1898					
January	9,150	1,295	2,288	1.47	1.69
February	1,920	1,240	1,450	.93	.97
March	10,200	1,185	1,984	1.27	1.46
April	14,325	1,688	3,425	2.20	2.45
May	2,165	1,158	1,566	1.00	1.15
June	2,095	920	1,181	.76	.84
July	14,020	780	2,806	1.80	2.08
August	18,700	1,490	4,774	3.06	3.53
September	33,975	1,925	7,434	4.77	5.31
October	28,450	1,850	6,096	3.91	4.51
November	4,530	2,150	2,889	1.92	2.14
December	8,950	2,112	3,179	2 09	2.35
The year	33,975	780	3,256	2.09	28.48
1899					
January	6,675	2,385	3,712	2.38	2.75
February	26,695	3,350	8,511	5.46	5.68
March	29,425	4,337	9,178	5.88	6.77
April	14,800	3,962	5,931	3.80	4.24
May	5,800	2,385	3,290	2.10	2.43
June	4,930	1,740	2,310	1.48	1.65
July	6,450	1,220	1,948	1.25	1.44
August	5,420	870	1,506	.97	1.12
September	4,700	910	1,413	.91	1.01
October	2,100	870	1,175	.75	.86
November	3,000	1,000	1,408	.90	1.00
December	7,200	1,160	2,242	1.44	1.66
The year	29,425	870	3,551	2.28	30.61

Estimated monthly discharge of Chattahoochee River at Oakdale—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1900					
January	6,300	1,050	2,275	1.46	1.68
February	28,650	1,280	5,929	3.80	3.95
March	10,800	3,000	5,137	3.29	3.79
April	18,000	2,630	5,484	3.52	3.92
May	5,160	2,450	3,296	2.11	2.44
June	24,600	3,000	8,207	5.26	5.87
July	12,600	3,720	5,847	3.75	4.32
August	5,160	2,540	3,275	2.10	2.43
September	12,900	1,700	3,277	2.10	2.34
October	4,360	2,185	3,234	2.07	2.39
November	6,000	1,700	2,436	1.56	1.74
December	4,140	2,100	2,753	1.76	2.03
The year	28,650	1,050	4,262	2.73	36.90
1901[a]					
January	31,300	2,044	5,536	3.55	4.09
February	5,028	2,272	3,214	2.06	2.15
March	36,550	2,044	5,303	3.40	3.92
April	12,780	2,846	5,149	3.30	3.68
May	25,000	2,511	4,781	3.06	3.53
June	10,500	2,984	4,749	3.04	3.39
July	9,474	2,040	3,225	2.07	2.39
August	24,500	1,829	7,847	5.03	5.80
September	15,980	2,676	4,153	2.66	2.97
October	4,344	1,758	2,600	1.67	1.93
November	1,898	1,690	1,763	1.13	1.26
December	48,800	1,690	5,583	3.58	4.13
The year	48,800	1,690	4,492	2.88	39.24
1902[a]					
January	9,588	1,960	2,881	1.85	2.13
February	35,500	2,415	5,788	3.71	3.86
March	41,800	3,245	8,984	5.76	6.64
April	7,194	3,045	4,065	2.61	2.91
May	3,450	2,765	3,150	2.02	2.33
June	5,484	2,335	3,004	1.93	2.15
July	3,245	1,750	2,113	1.35	1.56
August	2,415	1,555	1,786	1.14	1.31
September	8,106	1,890	2,983	1.88	2.10
October	1,960	950	1,470	.94	1.08
November	4,572	950	1,481	.95	1.06
December	8,904	1,620	3,082	1.94	2.24
The year	41,800	950	3,391	2.17	29.37
1903					
January	4,540	1,880	2,570	1.65	1.90
February	43,900	2,480	9,710	6.22	6.48
March	36,200	4,240	11,501	7.37	8.51
November	2,730	1,300	1,567	1.00	1.12
December	1,740	1,300	1,483	.95	1.10
1904					
January	3,640	1,480	1,998	1.28	1.48
February	7,510	1,610	2,504	1.61	1.74
March	8,060	1,810	2,749	1.76	2.03
April	4,640	1,610	1,983	1.27	1.42
May	4,140	1,180	1,699	1.09	1.26

a Estimate revised above gage height 14.0 feet on the basis of the 1904 rating curve.

CHATTAHOOCHEE RIVER AT WEST POINT.

This station was established July 30, 1896, by M. R. Hall, and the gage is now maintained by the United States Weather Bureau. It is located at the Montgomery street wagon bridge.

The channel is straight for about 2,000 feet above and 3,000 feet below the station. The current has a fair velocity, except at low stages. The right bank is high and overflows only at high water, when most of the town is covered. The left bank is somewhat lower and overflows for about 800 feet at a gage height of 20 feet. The bed of the stream is of sand and gravel and is unstable.

The bridge from which discharge measurements are made is in three spans, with short approaches from each end. The floor of the bridge is about 24 feet above low water. The initial point for soundings is the end of the hand rail on the right bank, downstream side of the bridge. A standard chain gage is fastened to the outside of the iron railing of the downstream footway at a point 122 feet from the initial point for soundings; length of chain, 29.26 feet. Bench marks were established as follows: (1) The top of the downstream end of the second iron floor beam under the bridge floor from the right-bank end of the bridge; elevation, 24.19 feet. (2) The top of the thirty-eighth milepost on the Franklin and West Point survey of the United States Engineers. This post is a cast-iron cap 6 inches square, set in concrete, approximately on a level with the ground, and marked "U. S. 38." A raised point in the center of the cap is the bench mark; elevation, 15.68 feet. The location of this post is on the right bank of the river, 340 feet upstream from the wagon bridge and 50 feet from the edge of the river and 60 feet south of the Episcopal Church.

Discharge measurements of Chattahoochee River at West Point.

Date	Gage height	Discharge
	Feet	*Sec.-ft.*
1895		
October 22	1.76	1,404
1896		
June 29		2,067
July 30	2.45	2,480
August 14	1.72	1,594
September 5	1.20	1,006
September 25	1.15	1,090
October 28	1.75	1,642
1897		
January 23	6.66	11,920
April 26	3.70	5,448
May 4	4.13	6,230
May 19	3.00	3,567
June 5	2.90	3,253
June 19	2.59	2,934
July 8	3.03	3,470
July 23	5.01	7,858
August 14	2.12	1,915
September 4	1.80	1,690
September 22	1.20	985
November 9	1.71	1,345
November 23	1.60	1,322
December 17	3.14	3,989
1898		
January 18	2.45	2,648
February 18	2.43	2,464
March 17	3.03	3,571
April 6	9.20	19,890
April 21	2.90	2,723
April 26	4.52	6,704
May 17	2.15	1,975
June 11	1.40	1,161
July 6	2.27	2,451
August 5	8.82	18,510
September 2	7.55	15,070
September 3	11.25	25,200
October 5	13.90	37,580
October 29	3.38	4,409
November 29	4.00	5,394
1899		
March 14	5.30	8,726
April 24	4.72	7,144
May 13	3.80	4,828
June 26	3.06	3,284
September 12	3.10	3,689
October 18	2.07	2,088
December 16	3.49	4,111
1900		
January 20	4.65	6,574
February 24	4.92	7,158
August 22	2.80	2,755
December 4	3.93	5,224
1901		
March 12	4.34	6,007
August 6	3.00	3,435
October 28	2.80	2,910
1902		
January 15	3.50	4,364
July 25	2.00	1,916
1903		
January 6	3.95	5,056
April 22	5.39	8,713
June 5	9.70	20,960
June 6	11.30	25,620
July 30	3.46	4,761
July 31	4.07	5,998
September 23	2.40	2,451
September 24	2.32	2,416
September 17	2.37	2,469
1904		
February 3–4	2.80	3,005
April 7	2.83	3,144
April 7	2.88	3,155
April 14	2.90	3,179
April 14	2.90	3,180
June 20	1.56	1,298
June 20	1.56	1,306
September 2	1.46	1,208
September 3	2.00	1,862
September 29	1.20	1.005
September 30	1.27	1,010
December 6	2.70	2,808
1905		
March 24	3.28	4,026
June 6	2.30	2,048
October 28	2.30	2,252
1906		
January 24	12.91	30,100
January 24	11.92	27,100
January 25	9.20	18,100
January 26	6.14	10,300
February 15	3.60	4,390
May 10	3.75	4,910
June 9	2.78	3,120
November 10	3.25	3,720

Daily gage height, in feet, of Chattahoochee River at West Point.

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Day	Aug.	Sept.	Oct.	Nov.	Dec.
1896						1896					
1	2.7	1.3	4.1	1.7	4.2	17	1.6	0.85	1.1	3.0	3.0
2	3.9	1.2	4.0	2.0	4.0	18	1.55	.8	1.1	2.6	3.0
3	4.5	1.1	3.0	3.25	3.75	19	1.5	.8	1.1	2.55	2.9
4	6.0	1.05	2.6	8.0	3.6	20	1.45	.8	1.1	2.4	2.8
5	5.5	1.0	2.4	9.2	3.4	21	1.4	.8	1.15	2.25	2.7
6	5.0	1.0	2.0	7.6	3.2	22	1.4	3.3	1.1	2.25	2.6
7	3.65	1.0	1.9	5.5	3.1	23	1.3	3.0	1.5	2.2	2.4
8	3.2	1.05	1.5	4.3	3.1	24	1.2	2.5	1.75	2.2	2.2
9	2.75	1.1	1.3	3.45	3.05	25	3.0	2.0	1.75	2.9	2.15
10	2.6	1.05	1.25	2.8	3.0	26	2.0	1.7	1.7	1.9	2.1
11	2.2	.95	1.25	2.0	2.9	27	1.8	1.6	1.65	1.8	2.1
12	2.0	.85	1.2	2.15	2.8	28	1.75	1.4	1.6	2.0	2.05
13	1.85	.85	1.15	6.3	2.65	29	1.6	3.6	1.5	4.0	2.0
14	1.7	.9	1.15	5.0	2.5	30	1.5	4.2	1.5	4.3	1.95
15	1.6	.9	1.15	4.5	3.0	31	1.4	.....	1.45	.....	1.9
16	1.6	.85	1.15	3.3	3.1						

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897												
1	1.9	3.15	3.65	4.0	3.9	2.65	1.9	2.9	1.8	1.1	1.3	2.5
2	1.9	4.4	3.6	4.0	4.0	2.7	1.9	3.0	1.7	1.1	1.3	2.5
3	1.9	7.0	3.5	3.95	3.8	2.8	2.0	3.2	1.65	1.05	1.3	2.5
4	1.95	7.4	3.5	4.4	3.75	2.85	2.3	2.8	1.65	1.05	1.5	2.4
5	2.0	7.1	3.6	3.5	3.65	2.9	3.0	2.8	1.6	1.0	2.3	2.6
6	2.0	6.0	4.1	10.2	3.6	2.95	3.5	2.5	1.6	1.0	2.0	2.75
7	2.0	6.0	10.95	11.0	3.6	2.8	2.5	2.4	1.5	1.0	1.8	2.85
8	1.95	5.2	9.3	10.5	3.6	2.7	3.0	2.2	1.5	.95	1.65	2.6
9	1.95	5.0	7.1	8.0	3.55	2.6	3.0	2.0	1.4	.95	1.7	2.6
10	1.9	4.7	5.5	7.1	3.5	2.6	2.9	1.9	1.4	.95	1.9	2.5
11	1.9	4.9	5.3	6.5	3.5	2.65	2.9	2.9	1.4	1.15	1.9	2.4
12	1.95	7.12	6.2	6.3	3.55	2.65	2.8	3.0	1.35	1.5	1.7	2.4
13	1.95	6.5	10.7	6.0	3.75	2.6	2.4	2.7	1.35	3.0	1.7	2.5
14	2.1	6.1	14.1	5.8	3.6	2.5	2.2	2.3	1.3	2.9	1.6	4.3
15	2.2	4.7	12.9	5.7	3.4	2.45	2.0	2.25	1.3	2.5	1.6	3.75
16	4.0	4.65	11.0	5.5	3.2	2.4	1.8	2.0	1.3	1.9	1.6	3.5
17	4.05	4.6	10.9	5.3	3.1	2.5	1.9	2.95	1.25	1.75	1.5	3.1
18	3.35	4.5	10.0	5.0	3.0	2.9	2.9	3.5	1.25	1.65	1.5	3.05
19	3.3	4.5	9.0	4.5	3.0	2.7	3.0	4.0	1.2	1.6	1.55	3.1
20	5.4	4.35	8.5	4.2	2.9	2.6	9.0	4.5	1.2	1.4	1.4	3.9
21	8.2	4.35	8.3	4.2	2.85	2.55	11.4	6.2	1.2	1.5	1.3	4.0
22	7.3	4.45	8.1	4.1	2.8	2.55	8.0	8.1	1.2	1.6	1.2	3.8
23	6.5	4.8	8.0	4.0	2.75	2.5	5.4	7.0	1.2	1.4	1.1	3.7
24	4.8	5.6	8.5	3.8	2.7	2.5	4.4	6.1	1.2	1.4	1.05	3.7
25	3.7	5.5	7.6	3.85	2.7	2.5	4.2	3.5	1.15	1.3	1.05	3.65
26	3.5	4.0	5.0	3.7	2.7	2.6	4.1	2.8	1.15	1.3	1.1	3.6
27	3.2	3.9	4.95	3.65	2.7	2.3	4.0	2.4	1.15	1.2	1.9	3.5
28	3.0	3.8	4.7	3.6	2.65	2.15	3.6	2.1	1.1	1.2	2.65	3.2
29	3.0	.....	4.5	3.6	2.65	2.0	3.5	2.1	1.1	1.4	2.6	2.8
30	2.95	.....	4.3	3.8	2.65	1.9	3.0	1.9	1.1	1.4	2.5	2.6
31	3.2	.....	4.0	.....	2.65	.....	2.8	1.9	.....	1.3	.....	2.5
1898												
1	2.4	3.05	2.3	6.3	3.2	1.7	1.25	3.4	3.75	1.8	3.38	3.65
2	2.35	2.9	2.3	5.1	3.15	1.65	1.15	2.9	3.9	1.85	3.35	3.6
3	2.2	2.8	2.3	3.4	3.15	1.65	1.1	3.0	12.0	2.9	3.35	5.25
4	2.2	2.6	2.8	3.2	3.0	1.65	1.1	6.0	14.5	5.6	3.3	5.0
5	2.2	2.2	3.1	7.0	2.8	1.5	1.05	7.6	15.3	11.0	3.3	4.0
6	2.15	2.2	3.15	9.2	2.6	1.5	2.2	9.15	18.2	14.5	3.45	4.0
7	2.15	2.2	3.0	9.5	2.4	1.45	2.35	8.2	17.5	12.0	3.5	4.0
8	2.15	2.1	2.9	8.2	2.3	1.45	2.7	6.3	9.0	13.0	3.55	3.8
9	2.15	2.1	2.5	6.0	2.3	1.4	3.5	5.1	6.2	10.0	3.6	3.75
10	2.1	2.1	2.2	5.4	2.3	1.4	4.0	4.3	4.5	7.5	3.75	3.7
11	2.15	2.1	2.1	5.0	2.2	1.4	3.3	3.0	4.0	4.1	3.75	3.6
12	3.0	2.1	2.1	3.5	2.2	1.4	3.0	3.4	3.75	3.9	3.75	3.6
13	2.75	2.05	2.1	2.95	2.2	1.6	2.8	6.75	3.6	3.2	3.85	3.6
14	2.6	2.05	2.1	2.8	2.2	1.65	2.7	5.2	3.4	3.2	3.8	3.4
15	2.6	2.0	3.3	2.6	2.15	1.9	3.0	4.6	3.4	3.15	3.9	3.35

Daily gage height, in feet, of Chattahoochee River at West Point—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1898												
16	2.75	2.0	3.2	2.4	2.15	2.0	3.3	4.0	3.4	3.0	5.6	3.35
17	2.9	2.0	3.0	2.4	2.15	1.8	4.0	4.1	3.2	3.0	5.75	3.35
18	2.95	2.1	2.8	2.35	2.15	1.8	3.6	5.0	3.0	5.0	5.0	3.3
19	2.75	2.6	2.6	2.35	2.1	1.7	3.0	4.2	2.4	5.5	5.0	3.3
20	2.7	2.6	2.4	3.0	2.1	1.55	2.7	3.8	2.0	5.4	4.9	3.25
21	2.8	2.5	2.15	2.75	2.1	1.5	2.2	3.5	1.9	4.9	4.8	3.25
22	3.2	2.5	2.15	2.6	2.1	1.75	2.3	3.4	1.9	4.8	4.3	4.0
23	2.8	2.5	2.15	4.0	2.0	2.0	2.4	3.3	1.9	4.5	4.0	5.65
24	2.9	2.5	2.15	7.0	1.9	2.1	4.0	3.25	2.9	4.5	3.7	5.0
25	2.9	2.45	2.1	5.3	1.85	2.0	7.6	3.2	3.0	4.0	3.7	4.5
26	3.0	2.4	2.1	4.0	2.5	2.1	5.5	3.2	2.75	3.6	3.7	4.4
27	6.0	2.3	2.1	3.6	2.0	2.2	4.1	5.6	2.5	3.4	3.65	4.2
28	5.5	2.3	2.1	3.4	1.8	1.75	4.0	10.6	2.05	3.4	3.6	4.0
29	4.05	.....	3.2	3.4	1.7	1.5	5.6	5.4	1.9	3.4	3.8	3.8
30	3.6	.....	4.1	3.2	1.7	1.4	6.0	3.8	1.8	3.38	3.7	3.8
31	3.1	.... ..	4.3	.....	1.7	.....	4.2	3.5	.....	3.38	.....	3.75
1899												
1	4.3	4.5	14.5	10.0	4.3	3.6	3.0	2.5	2.4	1.1	2.1	4.4
2	4.35	4.65	12.7	7.7	4.2	3.3	2.8	2.3	2.0	1.3	2.1	4.3
3	4.2	10.2	6.5	7.0	4.1	3.2	2.7	2.8	2.9	1.3	1.9	3.4
4	4.1	8.3	5.8	7.15	3.9	3.1	2.5	2.8	2.4	1.1	1.9	3.4
5	4.0	7.2	6.4	6.7	3.8	3.0	2.4	2.7	2.1	1.4	1.9	3.4
6	4.0	5.8	7.0	6.4	3.75	3.0	2.4	2.8	3.0	1.5	1.9	3.2
7	5.5	9.1	6.1	6.9	3.75	2.9	2.4	2.8	2.9	1.8	1.9	3.1
8	5.75	13.3	5.6	7.3	3.7	2.8	2.8	2.7	2.0	2.4	1.9	3.1
9	5.5	13.0	5.2	6.8	3.8	2.8	2.9	2.4	1.9	2.7	1.9	2.9
10	5.6	9.05	5.0	6.3	4.0	3.0	3.0	2.3	2.9	2.6	1.9	2.6
11	7.0	6.3	4.9	6.0	3.8	3.1	3.2	2.1	2.5	2.3	1.9	2.4
12	8.8	5.9	4.85	5.4	3.7	3.2	2.5	2.2	2.1	2.3	1.9	3.5
13	5.9	5.2	4.9	5.15	3.65	3.8	2.3	2.3	2.4	2.1	1.9	4.0
14	5.4	4.75	5.0	5.1	3.65	4.0	2.3	2.4	2.6	1.9	1.9	4.6
15	6.0	5.0	5.1	5.05	3.65	4.1	2.3	2.0	2.8	2.4	2.1	4.1
16	5.2	5.2	10.5	5.0	3.6	3.6	2.1	2.5	2.4	2.5	2.2	3.6
17	5.0	5.1	12.3	4.95	3.6	3.1	2.3	3.0	1.6	2.3	2.2	3.1
18	4.9	4.6	13.5	4.9	3.5	3.0	2.3	3.2	1.6	2.3	2.1	3.0
19	4.75	4.3	12.1	4.8	3.2	2.9	2.5	2.9	1.6	2.6	2.1	2.8
20	4.5	4.0	10.75	4.6	3.1	2.8	2.7	2.4	1.5	2.9	2.1	2.8
21	4.2	3.75	8.2	4.45	3.1	2.8	3.0	2.6	1.7	3.3	2.1	2.8
22	4.1	3.6	7.5	4.6	3.05	2.6	3.6	2.9	1.9	2.4	1.9	2.8
23	4.05	3.6	6.9	4.65	3.05	2.5	4.2	3.0	2.3	2.4	2.0	3.2
24	3.9	3.5	7.2	4.7	4.8	2.7	4.7	3.2	1.1	2.3	2.2	6.0
25	3.6	3.5	7.0	4.8	4.1	2.9	3.6	3.5	1.2	2.5	3.0	5.7
26	3.6	3.5	6.5	5.6	3.8	3.4	3.0	2.0	1.2	2.1	3.1	5.6
27	3.5	10.7	6.2	6.05	3.6	3.5	3.2	2.5	1.2	2.0	3.4	4.1
28	3.65	15.2	6.15	5.1	3.4	3.2	5.9	3.1	1.3	2.1	3.2	3.6
29	3.75	.....	6.8	5.0	3.3	3.0	3.3	3.6	1.8	2.1	3.5	3.4
30	4.0	.....	6.3	4.7	3.25	3.2	2.9	2.9	1.9	2.2	4.2	3.3
31	4.75	.....	7.15	.....	4.0	.....	2.7	2.1	.....	2.1	.....	3.2
1900												
1	3.0	2.8	5.9	4.1	4.9	3.4	6.3	6.4	4.1	2.6	2.8	3.7
2	2.8	2.6	4.7	4.1	4.8	3.3	9.4	5.7	6.1	2.5	2.7	3.2
3	2.5	2.4	4.6	4.05	4.6	3.3	7.8	5.0	4.5	2.5	4.6	3.1
4	2.5	3.0	5.0	4.05	4.4	3.6	7.0	4.5	3.2	2.6	4.2	3.9
5	2.4	3.0	4.8	4.0	4.3	5.0	6.5	4.0	3.0	3.8	4.3	4.5
6	2.8	4.6	4.5	3.95	4.2	4.8	6.2	3.6	2.9	4.0	3.6	5.8
7	2.9	4.5	4.2	3.9	4.0	4.3	5.4	3.4	2.8	4.2	3.4	5.9
8	2.8	4.2	5.0	3.9	3.8	5.1	5.0	3.2	2.7	3.7	3.2	4.6
9	2.8	4.6	8.1	3.85	3.6	8.1	5.1	3.1	2.6	3.5	3.1	3.9
10	2.7	7.3	7.5	3.8	3.6	8.5	4.2	3.0	2.5	3.4	3.0	3.6
11	3.4	8.6	6.3	4.9	3.5	5.8	4.0	2.9	2.4	3.4	3.0	3.3
12	4.7	12.2	5.6	6.1	3.4	4.6	3.6	2.8	2.3	3.6	2.9	3.2
13	4.4	19.12	4.7	6.7	3.4	6.5	5.4	3.4	2.2	3.8	2.9	3.1
14	4.7	19.5	4.5	6.0	3.4	3.9	5.0	3.8	2.3	3.7	2.8	4.9
15	4.9	18.5	4.3	5.5	3.3	4.2	4.8	3.0	9.2	3.2	2.8	4.2

Daily gage height, in feet, of Chattahoochee River at West Point—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900												
16	4.6	12 4	4.5	4.2	3.3	6.4	4.5	3.0	12.6	3.0	2.7	3.7
17	3.7	5.9	4.3	4.0	3.2	6.0	4.3	2.9	8.8	3.0	2.7	3.5
18	3.4	5.5	4.1	6.0	3.2	7.0	4.1	2.9	8.0	2.9	2.7	3.3
19	3.9	4.7	5.0	7.7	3.7	8.4	4.0	2.8	5.7	2.9	2.7	3.0
20	4.6	4.5	5.2	8.5	3.6	6.0	3.8	2.6	4.3	2.8	2.7	5.8
21	4.8	4.6	5.2	7.4	3.5	4.5	3.6	2.8	3.2	2.8	2.6	6.5
22	5.1	4.6	6.3	7.0	3.4	3.8	3.5	2.8	3.0	3.0	2.8	6.4
23	4.2	4.7	6.2	7.5	3.4	4.6	3.8	2.9	2.9	4.6	2.9	6.0
24	3.8	4 8	5.8	7.0	5.0	16.4	3.7	3.5	2.8	5.0	3.0	5.3
25	3.7	4.8	6.1	9.2	4.4	17.8	3.6	3.8	2.8	4.9	3.2	4.8
26	3.3	5.0	6.5	8.0	4.2	14.6	3.6	3.4	2.7	3.4	3.8	4.2
27	3.2	4.6	5.8	6.0	4.0	12.2	4.0	3.2	2.7	3.2	4.5	4.1
28	3.0	4.9	5.4	4.8	3.6	8.4	6.1	3.0	2.7	3.0	4.0	3.9
29	3.0	.....	5.3	4.5	3.5	5.6	6.7	2.9	2.6	2.9	5.0	3.6
30	2.9	.....	5.1	5.2	3.4	6.7	12.6	3.3	2.6	2.8	4.6	3.8
31	2.9	.....	4.5	.....	3.4	.....	9.2	3.9	.....	2.8	.....	7.2
1901												
1	7.8	4.7	4.7	7.8	4.0	6.7	3.9	3.6	5.8	3.4	2.6	2.5
2	7.2	4.6	4.6	6.7	4.0	6.0	4.5	3.0	5.6	6.3	2.6	2.4
3	7.0	4.6	4.4	6.2	4.0	7.1	5.0	2.9	4.6	5.1	2.6	2.9
4	6.1	12.6	4.2	10.3	4.0	6.9	4.9	2.8	3.9	4.4	2.5	3.2
5	5.3	13.8	4.0	8.6	4.0	5.8	4.2	2.9	3.8	3.6	2.9	3.1
6	4.7	10.2	3.9	6.4	3.9	5.5	3.7	3.0	3.8	3.3	2.8	3.1
7	4.0	6.4	3.7	6.2	3.9	6.4	3.5	4.8	3.6	3.1	2.7	3.0
8	3.9	6.3	3.5	6.0	3.9	5.9	3.3	6.4	3.5	3.0	2.6	3.0
9	3.9	7.0	3.5	5.1	3.9	4.7	3.2	6.0	3.4	2.9	2.6	2.9
10	3.8	6.5	3.4	4.6	3.8	4.2	3.1	4.0	3.3	2.9	2.6	3.5
11	5.0	6.2	4.1	4.0	3.8	4.0	3.0	3.9	3.1	2.9	2.6	3.3
12	13.3	6.0	4.2	3.8	3.8	3.8	3.0	5.3	3.1	2.9	2.5	3.2
13	15.0	5.4	4.5	5.2	3.8	4.0	3.0	4.2	4.7	3.0	2.5	3.0
14	14.7	4.8	4.0	10.4	3.7	4.9	2.9	4.0	4.0	3.1	2.5	3.2
15	12.4	4.5	3.9	8.5	3.9	4.7	2.8	3.8	3.9	3.3	2.5	6.4
16	6.1	4.4	3.7	6.9	3.8	7.9	3.4	6.8	3.4	3.5	2.5	7.1
17	5.0	4.3	3.7	6.0	3.8	7.6	6.6	10.4	5.0	3.2	2.5	7.6
18	6.0	4.2	3.6	5.2	4.0	7.4	3.4	7.6	10.4	3.2	2.4	6.3
19	5.3	4.2	3.4	6.4	4.2	6.2	3.1	10.1	12.7	3.2	2.5	4.4
20	4.8	4.0	3.4	7.6	4.5	4.5	6.4	7.8	7.8	3.1	3.0	3.6
21	4.6	3.9	3.6	7.0	3.4	4.2	4.2	6.5	4.8	3.0	3.4	3.3
22	4.4	3.9	3.8	6.2	15.7	4.0	3.9	8.2	4.1	2.8	3.5	3.3
23	4.3	3.8	4.0	5.5	17.2	3.9	3.7	14.1	3.8	2.8	3.1	3.2
24	4.2	3.8	4.3	5.0	12.8	3.8	3.2	17.1	3.6	2.8	2.9	3.1
25	4.1	4.6	4.0	4.8	10.5	3.7	3.0	13.6	3.4	2.8	2.8	3.9
26	4.0	4.2	3.9	4.6	6.2	3.7	2.9	8.2	3.4	2.7	2.7	4.6
27	3.9	4.0	9.6	4.4	5.5	4.7	2.8	7.1	3.3	2.7	2.6	5.4
28	4.0	3.9	12.1	4.2	5.0	4.2	2.8	6.0	3.3	2.7	2.6	6.8
29	4.9	.....	13.0	4.1	4.3	4.0	3.9	5.8	3.8	2.7	2.5	19.0
30	4.8	.....	5.9	4.1	5.6	3.8	4.1	5.3	3.5	2.7	2.5	25.0
31	4.7	.....	7.8	.....	7.0	.....	4.0	5.5	.....	2.7	.....	20.0
1902												
1	19.0	7.7	20.0	14.0	4.0	4.6	2.0	3.1	2.8	3.8	2.0	3.6
2	17.6	15.5	17.3	8.3	4.0	3.5	2.0	2.3	2.2	3.2	2.0	3.7
3	8.3	17.1	17.6	6.1	4.7	3.3	1.9	2.1	2.1	2.9	2.0	7.0
4	7.5	14.9	15.9	5.5	4.4	3.1	2.7	2.0	2.2	2.4	2.0	6.7
5	5.1	9.2	8.4	5.3	4.0	2.9	2.5	2.2	3.0	3.0	2.0	7.4
6	4.7	7.5	6.7	5.4	3.9	2.9	2.8	2.4	2.8	3.0	5.7	5.5
7	4.2	5.4	5.9	5.5	3.8	2.8	2.6	3.1	2.4	2.6	4.3	4.4
8	4.1	5.2	5.6	6.2	3.7	2.8	2.4	2.4	2.0	2.6	3.3	3.8
9	4.0	4.7	5.4	5.1	3.8	2.7	2.3	2.1	2.3	2.5	3.3	3.4
10	3.9	4.3	5.2	4.9	4.0	2.7	2.2	1.8	2.6	2.2	2.7	3.2
11	3.8	4.0	5.0	4.7	3.9	2.7	3.2	2.0	2.2	2.2	2.5	3.0
12	3.7	4.0	4.9	4.7	3.8	2.6	3.0	1.8	2.2	2.6	2.4	3.0
13	3.6	4.0	6.3	4.6	3.8	2.6	3.6	2.1	2.3	2.5	2.3	3.0
14	3.4	3.9	5.9	4.5	3.7	2.6	3.4	2.3	2.3	2.7	2.3	3.0
15	3.4	4.6	6.1	4.5	3.6	2.6	3.2	2.0	2.5	2.8	2.2	2.9

Daily gage height, in feet, of Chattahoochee River at West Point—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1902												
16	3.3	5.3	8.7	4.5	4.4	2.5	3.1	1.7	2.5	2.4	2.2	7.0
17	3.3	4.9	16.2	4.5	4.2	2.5	3.0	2.0	2.3	2.4	2.2	10.1
18	3.2	4.3	11.4	5.5	3.9	2.9	3.9	2.1	2.0	2.4	2.4	7.6
19	3.5	4.4	8.8	4.9	3.8	2.7	3.6	1.9	1.9	2.2	2.7	6.1
20	3.9	4.9	7.0	4.7	3.7	2.8	3.3	1.6	1.9	2.1	2.7	4.5
21	5.4	4.5	5.5	4.5	3.6	2.9	3.8	1.6	2.0	2.0	2.7	3.9
22	5.0	4.2	5.3	4.3	3.5	2.8	3.4	1.6	1.9	2.0	2.5	4.5
23	4.3	4.1	4.9	3.9	3.5	2.7	3.3	1.8	2.1	2.0	2.3	4.4
24	3.8	4.0	5.1	3.9	3.4	2.5	3.2	1.5	1.9	2.0	2.3	5.0
25	3.7	4.6	6.0	3.9	3.3	2.4	2.0	1.4	3.0	2.9	2.3	4.1
26	3.7	4.7	6.2	3.8	3.3	2.3	1.9	1.2	3.3	1.9	5.7	3.7
27	3.6	4.9	6.4	3.8	3.3	2.3	1.9	1.3	5.3	3.4	4.9	3.4
28	4.5	18.0	11.4	3.9	3.2	2.2	1.8	1.5	5.0	3.2	4.5	3.3
29	4.1	.....	14.9	3.9	3.1	2.2	2.0	3.0	4.5	2.7	3.5	3.2
30	4.4	.....	14.9	4.0	3.0	2.1	2.2	4.1	3.8	2.2	3.0	3.7
31	4.9	.....	14.6	.....	2.9	.....	2.4	3.0	.....	2.1	.....	4.1
1903												
1	4.1	3.7	11.6	12.2	4.4	5.7	4.0	3.8	2.2	2.1	2.0	2.2
2	.....	3.4	11.2	10.2	4.4	6.7	3.7	3.0	2.2	2.1	2.1	2.2
3	4.1	3.3	11.3	7.0	4.4	6.1	3.5	3.7	2.2	2.0	2.2	2.2
4	4.1	3.6	7.4	6.4	4.4	8.8	3.6	3.8	2.1	2.0	2.5	2.2
5	4.1	6.4	7.0	6.1	4.4	9.3	4.1	4.6	2.1	2.0	3.5	2.2
6	4.0	6.9	6.4	5.7	4.3	10.8	3.8	4.5	2.1	2.0	2.8	2.3
7	3.8	6.2	6.1	5.5	5.4	11.9	4.0	4.0	2.8	2.0	2.6	2.3
8	3.6	18.5	5.7	5.4	5.2	11.4	4.0	3.3	2.1	2.0	2.8	2.3
9	3.4	20.1	5.3	9.2	4.8	6.7	4.3	2.9	2.1	2.5	2.5	2.4
10	3.3	13.9	6.1	8.0	4.5	6.1	4.0	2.8	2.0	2.2	2.3	2.5
11	3.3	12.0	7.6	6.8	4.3	5.1	3.7	2.8	2.0	2.1	2.3	2.5
12	4.1	14.9	9.2	5.7	4.2	6.1	3.7	2.7	2.2	2.1	2.3	2.4
13	4.2	12.8	10.2	6.2	6.6	5.1	3.6	2.9	2.0	2.0	2.5	2.4
14	5.2	10.1	8.7	6.9	5.9	4.6	6.4	3.0	2.0	2.0	2.5	2.4
15	4.2	6.4	6.3	8.2	12.7	4.2	6.1	2.8	3.5	2.0	2.4	2.4
16	3.8	5.5	5.9	10.1	9.0	4.0	4.5	4.0	4.7	2.0	2.4	2.4
17	3.6	14.5	5.6	6.3	6.1	3.9	3.7	4.3	5.3	2.5	2.3	2.4
18	3.5	15.9	5.3	5.6	4.8	3.8	3.4	4.7	4.5	2.5	2.7	2.3
19	3.3	14.6	5.0	5.3	4.4	3.7	3.2	5.7	3.4	2.4	2.9	2.3
20	3.2	14.2	4.9	7.2	4.2	3.6	3.1	5.1	3.0	2.3	2.7	2.3
21	3.2	6.3	5.7	7.2	4.1	3.6	3.0	3.8	2.6	2.3	2.6	2.6
22	3.2	5.5	8.2	5.7	4.0	3.8	2.9	3.1	2.5	2.2	2.5	2.6
23	3.1	5.1	13.1	5.1	3.9	3.6	2.9	2.9	2.4	2.1	2.4	2.6
24	3.1	4.9	14.7	4.9	3.8	3.6	2.9	2.7	2.4	2.0	2.3	2.6
25	3.2	4.6	14.6	4.7	3.7	3.5	3.1	2.6	2.3	2.0	2.3	2.5
26	3.2	4.5	15.2	5.1	3.6	4.0	3.0	2.5	2.3	2.0	2.3	3.0
27	3.2	4.4	14.3	5.0	3.6	4.5	2.8	2.4	2.2	2.0	2.3	3.0
28	3.5	8.3	6.4	4.9	3.6	5.0	2.7	2.3	2.1	2.0	2.3	2.8
29	3.7	.....	7.0	4.6	3.6	5.2	2.7	2.3	2.1	2.0	2.2	2.7
30	3.5	.....	12.0	4.5	3.6	4.7	3.0	2.3	2.1	2.0	2.2	2.5
31	3.9	.....	13.5	.....	5.5	.....	4.0	2.3	.....	2.0	.....	2.4
1904												
1	2.4	2.9	3.3	2.9	2.5	3.0	2.5	2.6	2.3	1.2	1.2	1.7
2	2.3	2.9	3.3	2.9	2.5	3.6	2.3	2.7	1.4	1.2	.9	1.8
3	2.4	2.9	3.7	2.9	2.4	2.7	2.1	2.5	2.0	1.2	1.1	1.9
4	2.4	2.8	3.5	2.8	2.4	2.4	2.1	3.3	1.9	1.2	1.5	2.0
5	2.4	2.8	3.3	2.7	2.4	2.2	1.7	2.5	1.8	1.1	1.7	2.0
6	2.3	2.8	3.1	2.7	2.4	2.1	1.9	3.1	2.5	1.1	1.6	2.6
7	2.3	3.1	4.7	2.8	2.4	1.5	1.6	5.3	2.4	1.2	1.6	3.0
8	2.4	4.8	6.0	3.2	2.4	1.4	1.3	11.4	2.2	1.2	1.5	3.2
9	2.4	5.0	6.0	3.6	2.4	2.0	2.4	12.6	2.1	1.1	1.6	3.1
10	2.7	4.4	5.4	3.5	3.1	2.3	2.1	12.4	1.9	1.1	1.5	2.5
11	3.0	5.4	4.2	3.5	3.4	2.1	1.8	9.6	1.7	1.1	1.5	2.2
12	2.8	5.1	3.7	3.4	3.1	2.0	1.6	6.2	1.6	1.1	1.5	2.1
13	2.7	4.1	3.6	3.1	2.6	1.8	1.6	4.8	1.6	1.2	1.6	1.9
14	2.7	3.7	3.6	2.9	2.4	1.6	1.8	4.2	1.6	1.1	1.7	2.0
15	2.7	3.4	4.0	2.8	2.3	1.6	1.9	5.0	1.5	1.0	1.8	1.8

Daily gage height, in feet, of Chattahoochee River at West Point—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
16	2.6	3.3	4.2	2.7	2.3	1.6	1.4	4.0	1.5	1.0	1.7	1.8
17	3.5	3.2	3.7	2.7	2.3	1.6	1.4	3.9	1.4	1.0	1.6	1.8
18	3.6	3.0	3.4	2.7	2.3	1.5	1.7	3.4	1.4	1.1	1.6	1.8
19	3.3	3.1	3.2	2.7	2.2	1.5	1.4	3.0	1.4	1.0	1.6	1.8
20	3.1	3.7	3.1	2.7	2.1	1.5	2.0	2.9	1.3	1.1	1.6	1.8
21	2.8	4.0	3.0	2.7	2.0	1.5	1.7	2.3	1.3	1.2	1.6	1.7
22	3.3	5.4	3.0	2.7	2.0	1.4	2.0	2.4	1.4	.9	1.6	1.7
23	5.5	6.4	3.3	2.7	2.0	1.3	2.1	2.2	1.8	.9	1.8	1.7
24	5.1	6.1	3.2	2.6	1.9	1.7	2.3	2.2	1.9	.9	1.8	1.7
25	4.2	5.3	3.8	2.6	1.9	1.3	2.0	4.3	1.5	.9	1.8	1.9
26	3.8	4.3	3.8	2.6	1.9	1.4	1.9	5.1	1.4	.9	1.8	2.1
27	3.3	3.9	3.6	2.6	1.8	1.3	1.4	4.1	1.3	1.1	1.7	2.1
28	3.0	3.6	3.3	2.6	1.8	1.2	1.9	5.8	1.3	1.2	1.7	3.5
29	3.0	3.4	3.2	2.6	1.8	1.4	1.7	3.9	1.3	1.1	1.7	3.6
30	2.9	.....	3.1	2.6	1.8	2.0	2.1	3.0	1.3	1.0	1.6	3.7
31	2.9	.....	3.0	.....	2.7	.....	2.2	2.4	.....	1.1	.....	3.6
1905												
1	2.9	2.6	3.6	2.7	3.3	2.8	2.8	2.2	1.9	a 1.9	a 1.88	a 2.15
2	2.6	2.5	3.5	2.7	2.5	2.5	4.4	2.0	1.8	3.6	1.85	1.98
3	2.3	2.4	3.4	2.7	2.7	2.4	7.8	1.3	2.2	2.7	1.85	10.6
4	2.3	2.4	3.3	2.5	3.0	2.3	4.9	2.0	2.5	2.1	1.85	13.6
5	2.3	2.7	3.2	2.8	2.9	2.3	3.2	1.9	2.9	1.8	1.9	10.2
6	2.2	3.0	3.2	2.9	2.9	2.1	2.9	1.6	2.2	1.7	1.85	6.2
7	2.6	3.2	3.1	2.9	3.1	2.1	3.9	1.5	2.0	1.6	1.76	4.2
8	2.8	4.0	3.1	2.9	2.9	2.1	4.9	1.5	1.8	1.7	1.95	5.3
9	2.6	3.5	3.1	2.9	4.3	2.1	7.8	2.6	1.7	1.5	1.88	9.8
10	3.0	3.3	3.6	3.3	4.0	2.0	4.8	2.7	1.7	1.8	2.0	8.8
11	2.7	7.3	3.3	3.2	3.9	1.9	4.2	3.0	1.6	2.35	2.8	8.9
12	3.4	7.0	3.1	3.2	3.3	1.7	5.8	4.1	1.6	2.7	3.0	6.4
13	12.6	9.2	3.6	3.1	3.0	1.6	8.7	5.2	1.8	2.35	2.5	4.6
14	10.6	8.9	3.6	2.9	2.7	1.6	8.2	5.5	1.7	2.9	2.1	4.0
15	10.2	8.5	3.3	2.8	2.5	1.9	5.4	4.6	1.7	2.5	2.1	3.9
16	5.5	6.1	3.2	3.0	2.4	2.2	3.9	6.2	1.6	2.1	2.1	3.9
17	4.0	4.8	3.1	3.0	2.8	2.5	3.7	4.7	1.5	2.0	2.0	3.8
18	3.6	4.3	3.1	2.5	3.0	2.2	3.2	4.4	1.6	1.8	2.0	3.7
19	3.4	3.9	3.0	2.6	3.7	2.9	2.8	3.5	1.5	1.8	2.0	3.5
20	3.3	3.8	3.0	2.6	3.0	2.4	2.5	2.8	1.6	1.9	2.05	5.4
21	3.2	4.5	3.5	2.6	2.9	2.4	2.7	2.6	1.4	1.7	1.98	9.4
22	3.1	6.9	3.6	2.7	2.8	2.3	2.0	2.2	1.3	1.7	2.0	8.7
23	3.0	9.3	3.3	2.8	2.9	2.5	2.5	2.8	1.3	1.65	1.95	7.1
24	2.7	6.0	3.4	2.8	4.1	2.5	2.3	3.4	1.3	1.72	1.95	6.0
25	2.7	4.9	3.1	2.4	4.0	2.6	2.3	4.0	1.5	1.85	1.95	4.9
26	2.6	4.4	3.0	2.6	5.0	2.9	2.7	3.7	1.4	2.8	1.98	4.4
27	2.3	4.0	3.0	2.6	4.1	2.2	2.5	3.0	1.3	2.7	2.0	4.0
28	2.3	3.8	2.8	2.0	3.5	2.2	2.0	2.6	1.3	2.25	2.1	3.8
29	2.4	.....	2.8	2.0	3.2	2.4	1.4	2.0	1.3	2.1	2.1	3.8
30	2.5	.....	2.8	2.6	3.1	3.1	2.6	2.1	1.5	2.0	2.1	3.6
31	2.5	.....	2.7	.....	2.9	.....	2.3	2.0	.....	1.98	.....	3.6
1906												
1	3.7	4.6	3.1	6.4	3.6	3.0	2.5	6.4	7.2	6.3	3.5	3.3
2	3.6	4.4	3.1	6.4	3.5	2.8	3.0	5.1	8.2	6.2	3.45	3.25
3	5.3	4.2	3.5	5.4	3.4	2.7	2.5	4.9	5.9	7.0	3.4	3.25
4	13.1	4.0	4.2	5.0	3.7	2.8	4.0	5.2	4.9	8.5	3.4	3.25
5	12.9	4.0	3.8	4.7	4.1	3.3	3.2	6.0	4.1	9.4	3.35	3.2
6	12.2	3.9	4.1	4.6	4.1	3.2	2.8	6.8	11.2	7.6	3.35	3.25
7	12.6	4.0	3.8	4.4	4.3	2.9	2.6	4.9	9.4	5.6	3.4	3.35
8	5.7	4.0	5.6	4.3	5.5	2.8	3.1	4.1	6.1	5.3	3.3	3.3
9	4.9	3.9	8.1	4.2	4.9	2.8	6.0	4.0	4.3	5.0	3.3	3.25
10	4.6	3.9	6.4	4.5	4.1	2.6	4.2	3.9	4.7	4.4	3.3	3.3
11	4.4	3.7	5.2	4.7	3.7	2.6	4.4	3.6	4.5	4.2	3.25	4.0
12	4.3	3.7	4.5	4.4	3.5	2.6	3.9	4.3	5.7	4.0	3.25	4.4
13	4.4	3.6	4.1	4.3	3.4	4.6	3.5	3.7	4.6	3.9	3.3	5.0
14	4.4	3.6	3.9	4.0	3.3	8.5	3.8	6.2	4.2	3.8	3.3	4.1
15	4.4	3.6	7.6	4.1	3.2	8.6	7.0	8.2	3.8	3.7	3.6	3.7

a From October 1 to December 31 two readings a day were made; before that only one reading.

Daily gage height, in feet, of Chattahoochee River at West Point—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
16	4.2	3.6	11.6	4.1	3.2	6.8	6.8	5.6	3.5	3.7	3.55	3.5
17	4.1	3.5	11.7	4.0	3.1	5.2	7.6	6.1	3.4	3.6	3.6	3.75
18	4.1	3.4	11.0	4.1	3.0	4.6	6.5	5.2	3.3	10.6	4.5	3.8
19	4.2	3.4	11.0	3.9	3.0	3.8	8.5	5.9	3.3	12.3	5.0	5.0
20	4.1	3.4	18.9	3.8	2.95	3.6	8.6	7.5	4.0	7.8	5.1	5.6
21	4.0	3.4	17.6	3.8	2.9	3.4	6.4	6.8	7.4	6.2	5.5	5.1
22	5.4	3.4	15.1	3.8	2.5	3.15	5.1	6.4	6.5	4.7	4.6	4.7
23	11.6	3.4	9.2	3.8	3.0	3.0	5.7	5.0	5.9	4.3	4.1	4.3
24	13.4	3.3	6.0	3.5	2.8	2.8	8.0	4.3	5.3	4.0	3.6	4.1
25	9.8	3.4	5.2	3.6	2.8	2.7	5.5	4.5	5.3	3.95	3.65	3.8
26	6.6	3.4	4.9	3.7	2.8	2.6	5.6	4.0	5.4	3.85	3.5	3.6
27	5.7	3.2	4.8	3.5	3.3	3.1	5.4	3.6	4.3	3.75	3.45	3.6
28	5.4	3.2	7.2	3.1	3.4	3.1	3.9	4.2	4.5	3.55	3.4	3.65
29	5.4	.....	7.6	3.5	3.9	3.0	4.0	4.0	4.5	3.55	3.35	4.0
30	5.3	.....	6.5	3.8	3.4	2.8	4.3	5.4	5.0	3.55	3.3	4.4
31	4.9	.....	6.6	.....	3.1	.....	5.0	6.0	.....	3.5	.....	7.0

Rating tables for Chattahoochee River at West Point.

AUGUST 1, 1896, TO DECEMBER 31, 1903.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.80	780	2.90	3,170	5.00	8,040	9.50	20,750
.90	820	3.00	3,340	5.20	8,592	10.00	22,200
1.00	870	3.10	3,520	5.40	9,144	10.50	23,650
1.10	930	3.20	3,700	5.60	9,696	11.00	25,100
1.20	1,000	3.30	3,890	5.80	10,248	11.50	26,590
1.30	1,090	3.40	4,080	6.00	10,800	12.00	28,800
1.40	1,180	3.50	4,280	6.20	11,352	12.50	31,110
1.50	1,280	3.60	4,480	6.40	11,904	13.00	33,410
1.60	1,380	3.70	4,700	6.60	12,456	13.50	35,710
1.70	1,490	3.80	4,920	6.80	13,008	14.00	38,030
1.80	1,600	3.90	5,140	7.00	13,560	15.00	42,630
1.90	1,720	4.00	5,370	7.20	14,112	16.00	47,230
2.00	1,840	4.10	5,620	7.40	14,664	17.00	51,830
2.10	1,970	4.20	5,880	7.60	15,240	18.00	56,430
2.20	2,100	4.30	6,140	7.80	15,820	19.00	61,030
2.30	2,240	4.40	6,400	8.00	16,400	20.00	65,630
2.40	2,380	4.50	6,670	8.20	16,980	21.00	70,230
2.50	2,530	4.60	6,940	8.40	17,560	22.00	74,830
2.60	2,680	4.70	7,215	8.60	18,140	23.00	79,430
2.70	2,840	4.80	7,490	8.80	18,720	24.00	84,030
2.80	3,000	4.90	7,765	9.00	19,300	25.00	88,630

a Above gage height 14.00 feet the rating curve is a tangent, the difference being 460 per tenth. Below gage height 1.20 feet the above rating table has been revised.

Rating tables for Chattahoochee River at West Point—Continued.

JANUARY 1, 1904, TO DECEMBER 31, 1905.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.90	800	2.30	2,240	3.70	4,720	6.20	10,800
1.00	850	2.40	2,380	3.80	4,940	6.40	11,380
1.10	920	2.50	2,530	3.90	5,160	6.60	11,940
1.20	1,000	2.60	2,680	4.00	5,380	6.80	12,520
1.30	1,090	2.70	2,840	4.20	5,830	7.00	13,100
1.40	1,180	2.80	3,000	4.40	6,290	8.00	16,000
1.50	1,280	2.90	3,170	4.60	6,760	9.00	18,900
1.60	1,380	3.00	3,340	4.80	7,240	10.00	21,800
1.70	1,490	3.10	3,520	5.00	7,740	11.00	24,700
1.80	1,600	3.20	3,700	5.20	8,240	12.00	27,600
1.90	1,720	3.30	3,890	5.40	8,740	13.00	30,500
2.00	1,840	3.40	4,080	5.60	9,260	14.00	33,400
2.10	1,970	3.50	4,280	5.80	9,780		
2.20	2,100	3.60	4,500	6.00	10,300		

[a] Above gage height 6.5 feet the rating curve is a tangent, the difference being 290 per tenth.

Rating table for Chattahoochee River at West Point, for 1906.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.50	2,530	3.70	4,690	4.90	7,290	8.00	14,900
2.60	2,680	3.80	4,880	5.00	7,520	9.00	17,740
2.70	2,840	3.90	5,090	5.20	7,980	10.00	20,700
2.80	3,000	4.00	5,300	5.40	8,440	11.00	23,880
2.90	3,170	4.10	5,510	5.60	8,920	12.00	27,100
3.00	3,340	4.20	5,730	5.80	9,400	13.00	30,500
3.10	3,520	4.30	5,950	6.00	9,880	14.00	33,900
3.20	3,700	4.40	6,170	6.20	10,360	15.00	37,350
3.30	3,890	4.50	6,390	6.40	10,840	16.00	40,800
3.40	4,080	4.60	6,610	6.60	11,320	17.00	44,250
3.50	4,280	4.70	6,830	6.80	11,820	18.00	47,700
3.60	4,490	4.80	7,060	7.00	12,320	19.00	51,150

NOTE.—The above table s based on discharge measurements made during 1903–1906 and is well defined.

Estimated monthly discharge of Chattahoochee River at West Point.

[Drainage area, 3,300 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1896 [a]					
August	10,800	1,000	2,854	0.86	0.99
September	5,880	780	1,469	.44	.49
October	5,620	980	1,624	.49	.56
November	19,900	1,490	5,074	1.54	1.72
December	5,880	1,720	3,114	.94	1.08
1897 [b]					
January	17,000	1,720	4,270	1.29	1.49
February	14,700	3,610	8,532	2.59	2.70
March	38,500	4,290	14,392	4.36	5.03
April	25,100	4,490	9,518	2.88	3.21
May	5,370	2,760	3,788	1.15	1.33
June	3,260	1,720	2,647	.80	.89
July	26,300	1,600	5,140	1.56	1.80
August	16,700	1,720	4,253	1.29	1.49
September	1,600	930	1,138	.34	.38
October	3,340	845	1,290	.39	.45
November	2,760	900	1,474	.45	.50
December	6,140	2,380	3,536	1.07	1.23
The year	38,500	845	4,998	1.51	20.50

[a] Estimates for 1896 were revised on the basis of the 1898 rating surve.

[b] Estimates for 1897 wans revised on the basis of the 1898 rating curve.

Estimated monthly discharge of Chattahoochee River at West Point—Continued.

[Drainage area, 3,300 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1898 *a*					
January	10,800	1,970	3,321	1.01	1.16
February	3,430	1,840	2,319	.70	.73
March	6,140	1,970	2,785	.84	.97
April	20,750	2,310	6,931	2.10	2.34
May	3,700	1,540	2,235	.68	.78
June	2,100	1,180	1,491	.45	.50
July	15,240	900	4,282	1.29	1.49
August	23,940	3,170	8,615	2.61	3.01
September	57,350	1,600	11,080	3.36	3.75
October	40,330	1,600	9,511	2.88	3.32
November	10,110	3,890	5,904	1.79	2.00
December	9,884	3,795	5,272	1.60	1.84
The year	57,350	900	5,311	1.61	21.89
1899 *c*					
January	18,720	4,280	7,483	2.27	2.62
February	43,550	4,280	12,908	3.91	4.07
March	40,330	7,627	15,696	4.76	5.48
April	22,200	6,535	10,157	3.08	3.44
May	7,490	3,430	4,716	1.43	1.65
June	5,625	2,530	3,625	1.10	1.23
July	10,524	1,970	3,419	1.04	1.20
August	4,280	1,840	2,819	.85	.98
September	3,340	930	1,971	.60	.67
October	3,890	930	2,085	.63	.72
November	5,880	1,720	2,303	.70	.78
December	10,800	2,380	4,685	1.42	1.64
The year	43,550	930	5,989	1.82	24.48
1900					
January	8,316	2,380	4,554	1.38	1.59
February	68,330	2,380	14,652	4.44	4.62
March	16,690	5,625	8,941	2.71	3.13
April	19,880	4,920	9,563	2.90	3.23
May	8,040	3,700	5,024	1.52	1.75
June	55,510	3,890	13,983	4.24	4.73
July	31,570	4,280	9,277	2.81	3.24
August	11,904	3,000	4,418	1.34	1.54
September	31,570	2,100	6,212	1.88	2.10
October	8,040	2,530	4,094	1.24	1.43
November	8,040	2,680	4,054	1.23	1.37
December	14,112	3,340	6,571	1.99	2.29
The year	68,330	2,100	7,612	2.31	31.02
1901					
January	42,630	4,920	11,748	3.56	4.11
February	37,100	4,920	10,015	3.03	3.16
March	33,410	4,280	7,952	2.41	2.78
April	23,360	4,920	11,022	3.34	3.73
May	52,750	4,700	10,814	3.28	3.79
June	16,110	4,920	8,487	2.57	2.87
July	12,456	3,000	4,964	1.50	1.73
August	51,290	3,000	12,982	3.93	4.54
September	32,080	3,520	7,145	2.16	2.41
October	11,628	2,840	3,888	1.18	1.36
November	4,280	2,380	2,835	.86	.96
December	88,630	2,380	12,116	3.67	4.24
The year	88,630	2,380	8,664	2.62	35.68

a Estimates below gage height 1.20 feet for 1898 and 1899 have been revised.

c Estimates below gage height 1.20 feet for 1898 and 1899 have been revised.

Estimated monthly discharge of Chattahoochee River at West Point—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1902					
January	61,080	3,700	9,585	2.90	3.34
February	56,430	5,145	13,852	4.20	4.37
March	65,630	7,765	21,982	6.66	7.68
April	33,080	4,920	8,231	2.49	2.78
May	7,215	3,170	4,791	1.45	1.67
June	6,940	1,970	2,962	.90	1.00
July	5,145	1,600	2,988	.91	1.05
August	5,625	1,000	2,061	.62	.71
September	8,868	1,720	2,963	.90	1.00
October	4,920	1,720	2,603	.79	.91
November	9,972	1,840	3,460	1.05	1.17
December	22,490	3,170	7,187	2.18	2.51
The year	65,630	1,000	6,889	2.09	28.19
1903					
January	8,592	3,520	4,708	1.43	1.65
February	66,090	3,890	21,598	6.54	6.81
March	43,550	7,765	19,626	5.95	6.86
April	29,720	6,670	12,345	3.74	4.17
May	32,080	4,480	7,896	2.39	2.76
June	28,340	4,280	9,976	3.02	3.37
July	11,904	2,840	4,782	1.45	1.67
August	9,972	2,240	4,208	1.27	1.46
September	8,868	1,840	2,825	.86	.96
October	2,530	1,840	1,988	.60	.69
November	4,280	1,840	2,485	.75	.84
December	3,340	2,100	2,463	.75	.86
The year	66,090	1,840	7,908	2.40	32.10
1904					
January	9,000	2,240	3,520	1.07	1.23
February	11,380	3,000	5,447	1.65	1.78
March	10,800	3,340	4,858	1.47	1.70
April	4,500	2,680	3,107	.942	1.05
May	4,080	1,600	2,285	.692	.798
June	4,500	1,000	1,696	.514	.574
July	2,580	1,090	1,705	.517	.596
August	29,340	2,100	7,515	2.28	2.63
September	2,530	1,090	1,484	.450	.502
October	1,000	800	913	.277	.319
November	1,600	800	1,375	.417	.465
December	4,720	1,490	2,294	.695	.801
The year	29,340	800	3,016	.914	12.44
1905					
January	29,340	2,100	5,363	1.63	1.88
February	19,770	2,380	8,915	2.70	2.81
March	4,500	2,840	3,733	1.13	1.30
April	3,390	1,840	2,930	.888	.991
May	7,740	2,380	3,869	1.17	1.35
June	3,520	1,380	2,257	.684	.763
July	18,080	1,180	5,724	1.73	1.99
August	10,840	1,090	3,743	1.13	1.30
September	3,170	1,090	1,505	.456	.509
October	4,500	1,280	2,082	.616	.710
November	3,340	1,556	1,923	.583	.650
December	32,240	1,816	10,380	3.15	3.63
The year	32,240	1,090	4,965	1.32	17.88
1906					
January	31,900	4,480	11,700	3.55	4.09
February	6,610	3,700	4,660	1.41	1.47
March	50,800	3,520	14,200	4.30	4.96
April	10,800	3,520	5,880	1.78	1.99
May	8,680	2,530	4,270	1.29	1.49
June	16,600	2,680	4,840	1.47	1.64
July	16,600	2,530	7,660	2.32	2.68
August	15,400	4,480	8,110	2.46	2.84
September	24,500	3,890	8,540	2.59	2.89
October	28,100	4,280	8,840	2.68	3.09
November	8,680	3,800	4,700	1.42	1.58
December	12,300	3,700	5,360	1.62	1.87
The year	50,800	2,530	7,400	2.24	30.59

NOTE.—Values are probably excellent.

SOQUE RIVER NEAR DEMOREST.

This station was established July 16, 1904, by M. R. Hall. It is located at Cannon Bridge, on the road from Cornelia to Acorn, 2½ miles from Demorest and about 4 miles above the mouth of the river.

The channel is curved for 500 feet above and slightly curved for 500 feet below the station. The current is swift. Both banks are high and wooded; the right overflows during extreme high water. The bed of the stream is composed largely of rock and is permanent. There is but one channel at all stages. Discharge measurements are made from the single-span wooden wagon bridge, which has a 28-foot approach on the left bank and a 90-foot approach on the right bank. The initial point for soundings is the end of the bridge on the upstream side at the left bank.

The gage is in two sections: The first is a vertical staff, reading from 0 to 10 feet, fastened to the sill and upstream post of the trestle bent at the left bank. An additional section, established September 12, 1905, is a vertical staff, reading from 0.7 foot to 6 feet, fastened to the stump of an ironwood tree on the right bank about 20 feet above the bridge. The gage is read once each day by Charles Cannon. Bench marks were established as follows: (1) The top of the upstream end of the right-bank wooden pier, marked with white paint; elevation, 21.20 feet. (2) A nail in the stump of the ironwood tree to which the second section of the gage is attached; elevation, 6.00 feet. Elevations refer to the datum of the gage.

Discharge measurements of Soque River near Demorest.

Date	Gage height	Discharge	Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*	1905	*Feet*	*Sec.-ft.*
June 8	1.74	182	September 6	1.81	196
July 16	1.46	123	September 12	1.81	196
August 24	1.81	202	October 23	1.71	168
October 28	1.31	102			
October 28	1.31	101	1906		
November 23	1.58	150	January 23	4.16	1,080
1905			January 23	3.81	905
March 2	2.12	287	June 27	2.08	242
May 27	2.41	334	July 27	2.82	488
July 19	2.26	327	October 1	3.48	790
			October 2	5.33	1,750
			October 2	5.37	1,770

Daily gage height, in feet, of Soque River near Demorest.

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904							1904						
1	.....	1.25	1.65	1.4	1.35	1.4	17	1.4	1.8	1.5	1.3	1.4	1.5
2	.....	2.1	1.65	1.35	1.4	1.4	18	1.35	1.8	1.45	1.3	1.4	1.5
3	.....	2.15	1.6	1.35	1.4	1.45	19	1.4	1.75	1.5	1.3	1.4	1.55
4	.....	1.7	2.75	1.35	1.65	1.55	20	1.4	2.2	1.45	1.3	1.4	1.5
5	.....	2.0	2.6	1.35	1.6	3.05	21	1.4	1.75	1.6	1.25	1.4	1.5
6	.....	3.45	2.0	1.35	1.5	2.3	22	3.7	1.7	1.5	1.25	1.45	1.45
7	.....	1.6	1.85	1.4	1.4	1.7	23	1.55	1.6	1.4	1.3	1.6	1.45
8	.....	5.25	2.1	1.4	1.4	1.65	24	1.5	1.65	1.4	1.3	1.65	1.45
9	.....	2.9	1.85	1.35	1.35	1.55	25	2.3	2.3	1.45	1.3	1.5	1.7
10	.....	2.7	1.7	1.4	1.35	1.5	26	1.6	2.35	1.45	1.3	1.45	1.65
11	.....	1.95	1.6	1.35	1.35	1.45	27	1.45	2.4	1.5	1.3	1.4	2.4
12	.....	2.4	1.6	1.35	1.4	1.45	28	1.4	2.1	1.45	1.3	1.4	2.3
13	.....	2.0	1.6	1.35	1.45	1.55	29	1.65	2.0	1.4	1.3	1.4	2.1
14	.....	1.95	1.55	1.35	1.45	1.5	30	1.5	1.75	1.4	1.3	1.4	1.85
15	.....	1.8	1.5	1.3	1.4	1.5	31	2.7	1.7	.....	1.35	.....	1.7
16	1.45	1.85	1.5	1.3	1.4	1.5							

Daily gage, in feet, of Soque River near Demorest—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	1.7	1.75	2.25	1.9	1.9	2.0	8.6	2.0	1.6	1.8	1.75	1.7
2	1.65	1.75	2.2	1.85	1.95	2.0	3.1	1.9	1.9	1.8	1.75	1.7
3	1.65	1.8	2.1	1.85	2.1	2.1	2.3	2.0	1.9	1.85	1.7	6.8
4	1.6	1.8	2.1	1.8	2.0	2.1	2.0	2.0	1.85	1.75	1.7	3.2
5	1.6	1.85	2.05	2.0	1.95	2.1	1.9	1.9	1.85	1.7	1.7	2.2
6	2.25	1.9	2.0	2.0	3.5	2.0	3.9	1.9	1.8	1.7	1.75	2.1
7	2.7	2.0	2.0	1.9	3.35	2.0	3.1	2.7	1.8	1.7	1.7	2.0
8	1.9	2.0	2.0	1.9	2.4	2.0	2.1	2.7	1.8	1.75	1.7	1.95
9	1.85	3.5	2.1	1.85	2.2	2.9	2.1	2.3	1.8	3.5	1.7	6.6
10	1.85	3.4	2.4	1.8	2.1	3.0	3.1	2.8	1.8	2.4	1.75	3.0
11	1.8	3.1	2.15	1.8	2.05	2.6	3.0	4.2	1.8	2.2	1.75	2.5
12	7.4	3.3	2.2	1.85	2.05	2.4	3.5	3.5	1.75	2.0	1.7	2.3
13	3.8	3.4	2.15	1.85	2.0	2.2	2.7	2.6	1.8	1.9	1.7	2.2
14	2.15	3.1	2.1	1.8	1.9	1.95	6.9	2.5	1.8	1.85	1.7	2.1
15	2.1	2.8	2.1	1.8	3.7	1.8	4.3	3.4	1.8	1.8	1.7	2.1
16	2.0	2.6	2.05	1.8	3.4	1.95	4.3	2.1	1.8	1.8	1.7	2.2
17	1.9	2.2	2.05	1.8	2.9	2.1	2.7	2.1	1.75	1.8	1.65	2.1
18	1.9	2.2	2.0	1.8	2.1	2.0	2.3	2.1	1.75	1.8	1.65	2.1
19	1.85	2.1	2.0	1.8	2.05	2.8	2.2	2.1	1.75	1.8	1.7	2.0
20	1.85	7.1	2.0	1.85	2.0	2.6	4.1	2.1	1.8	1.85	1.7	3.1
21	1.8	5.4	2.0	1.8	2.0	2.6	2.7	2.0	1.8	1.8	1.7	3.6
22	1.8	3.1	2.0	1.85	2.1	2.4	2.6	2.0	1.75	1.75	1.7	2.4
23	1.8	2.8	2.0	1.85	4.0	2.2	2.4	2.2	1.75	1.7	1.7	2.4
24	1.75	2.6	1.95	1.8	2.8	2.1	2.1	2.1	1.75	1.7	1.7	2.4
25	1.75	2.5	1.95	1.8	2.4	1.95	2.1	2.1	1.75	1.75	1.75	2.4
26	1.7	2.4	1.95	2.2	2.4	1.85	2.0	2.3	1.8	2.1	1.9	2.4
27	2.0	2.35	1.95	2.0	2.4	1.8	1.95	2.1	1.8	2.0	1.8	2.2
28	1.9	2.25	1.95	1.9	2.2	1.8	2.0	1.95	1.75	1.8	1.75	2.4
29	1.8	.....	1.95	1.95	2.8	1.85	2.1	2.0	1.7	1.8	1.7	2.2
30	1.7	.....	1.9	1.9	2.7	11.9	2.1	1.75	1.8	1.75	1.7	2.2
31	1.7	.....	1.9	.....	2.1	.....	2.1	1.65	.....	1.75	.....	2.1
1906												
1	2.1	2.65	2.2	2.75	2.5	2.2	2 05	2.85	4.4	4.4	2.55	2.4
2	2.05	2.55	2.15	2.75	2.5	2.25	2.05	2.7	3.7	5.6	2.5	2.4
3	8.2	2.5	2.25	2.7	3.0	2.3	2.05	3.0	3.0	7.5	2.5	2.4
4	5.8	2.45	2.2	2.65	2.75	2.6	2.0	2.75	6.4	3.8	2.6	2.45
5	3.6	2.4	2.2	2.7	2.5	2.3	2.1	2.7	5.2	2.5	2.6	2.4
6	3.0	2.35	2.25	2.65	2.5	2.3	3.3	2.6	3.5	2.3	2.55	2.45
7	2.4	2.35	2.2	2.65	2.85	2.2	2.45	2.75	3.2	2.35	2.55	2.45
8	2.35	2.3	3.2	2.65	2.5	2.2	3.0	2.7	2.85	3.7	2.55	2.45
9	2.5	2.3	2.5	2.8	2.4	2.2	2.85	2.6	2.8	3.5	2.55	2.5
10	2.4	2.3	2.3	2.75	2.4	2.2	2.7	2.6	4.3	3.1	2.6	2.55
11	3.0	2.25	2.25	2.7	2.4	2.25	2.95	2.65	3.8	2.8	2.6	6.1
12	2.9	2.4	2.2	2.6	2.35	5.0	2.9	2.5	3.9	2.45	2.55	4.3
13	2.7	2.3	2.25	2.55	2.35	3.2	2.65	2.4	3.6	2.35	2.55	3.0
14	2.55	2.25	2.8	2.6	2.3	2.85	2.1	2.35	2.9	2.8	2.5	2.9
15	2.45	2.25	8.1	2.9	2.25	2.8	5.0	4.8	2.85	3.1	2.5	2.85
16	2.65	2.2	3.4	2.8	2.25	2.75	2.8	3.0	2.5	3.15	2.7	2.95
17	2.55	2.2	3.1	2.75	2.2	2.55	2.8	2.8	2.35	3.9	2.65	4.8
18	2.4	2.2	3.7	2.55	2.2	2.4	4.6	a13.5	5.8	4.8	2.65	3.6
19	2.3	2.2	8.3	2.5	2.2	2.35	3.2	4.0	5.0	3.8	4.0	3.4
20	2.25	2.2	3.8	2.5	2.25	2.25	2.9	3.4	4.0	3.4	3.8	2.95
21	2.2	2.25	3.2	2.5	2.25	2.2	2.95	2.9	3.2	3.1	3.6	2.9
22	6.7	2.4	3.1	2.45	2.2	2.2	5.5	2.8	6.2	3.0	3.2	2.85
23	5.6	2.2	2.85	2.45	2.2	2.2	4.4	3.2	5.3	2.95	3.0	2.6
24	3.4	2.2	2.7	2.45	2.2	2.5	3.2	2.9	4.0	2.9	2.8	2.6
25	2.8	2.2	2.65	2.4	2.25	2.2	2.95	2.8	3.6	2.85	2.6	2.55
26	2.55	2.2	2.5	2.4	2.45	2.15	2.7	2.7	3.7	2.8	2.55	2.55
27	2.45	2.25	3.2	2.5	3.2	2.1	2.75	2.65	3.8	2.8	2.5	2.7
28	2.95	2.2	3.1	3.0	3.0	2.1	2.9	2.6	3.8	2.75	2.45	2.8
29	2.9	.....	3.2	2.55	2.8	2.8	2.75	8.2	3.3	2.7	2.5	2.75
30	2.7	.....	4.0	2.5	2.35	2.2	2.7	4.9	4.2	2.65	2.45	2.9
31	2.6	.....	2.85	.....	2.25	.....	3.4	6.2	.....	2.6	.....	6.2

a Maximum gage height 17.0 feet.

Rating tables for Soque River near Demorest.

JULY 16 TO DECEMBER 31, 1904.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.25	93	1.50	132	1.80	198	2.10	282
1.30	100	1.60	152	1.90	224	2.20	314
1.40	115	1.70	174	2.00	252		

JANUARY 1 TO DECEMBER 31, 1905.[b]

1.60	151	2.50	393	3.30	685	5.00	1,500
1.70	171	2.60	426	3.40	725	6.00	2,000
1.80	193	2.70	460	3.50	770	7.00	2,500
1.90	217	2.80	495	3.60	815	8.00	3,000
2.00	243	2.90	531	3.70	860	9.00	3,500
2.10	271	3.00	568	3.80	905	10.00	4,000
2.20	300	3.10	606	3.90	950	11.00	4,500
2.30	330	3.20	645	4.00	1,000	12.00	5,000
2.40	361						

a Discharge estimated above gage height 2.20 feet.
b Above gage height 4.0 feet the rating curve is a tangent, the difference being 50 per tenth.

JANUARY 1 TO DECEMBER 31, 1906.

2.00	243	3.00	568	4.00	1,000	5.80	2,070
2.10	271	3.10	606	4.20	1,100	6.00	2,220
2.20	300	3.20	645	4.40	1,200	6.20	2,370
2.30	330	3.30	685	4.60	1,310	6.40	2,520
2.40	361	3.40	725	4.80	1,420	6.60	2,680
2.50	393	3.50	770	5.00	1,540	6.80	2,840
2.60	426	3.60	815	5.20	1,665	7.00	3,000
2.70	460	3.70	860	5.40	1,795	8.00	3,880
2.80	495	3.80	905	5.60	1,930	9.00	4,780
2.90	531	3.90	950				

NOTE.—The above table is based on discharge measurements made during 1904-1906 and is well defined below gage height 6 feet. Above gage height 7.4 feet the rating curve is a tangent, the difference being 90 per tenth.

Estimated monthly discharge of Soque River near Demorest.

[Drainage area 112 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1904					
July 16-31	980	108	218	1.95	1.16
August	1,745	93	322	2.88	3.32
September	525	115	174	1.55	1.73
October	115	93	104	.929	1.07
November	163	108	122	1.09	1.22
December	666	115	183	1.63	1.88
1905					
January	2,700	151	314	2.80	3.23
February	2,550	182	527	4.71	4.90
March	361	217	257	2.29	2.64
April	300	193	210	1.88	2.10
May	1,000	217	390	3.48	4.01
June	4,950	193	455	4.06	4.53
July	3,300	217	626	5.59	6.44
August	1,100	161	343	3.06	3.53
September	217	151	190	1.70	1.90
October	770	171	222	1.98	2.28
November	217	161	175	1.56	1.74
December	2,400	171	474	4.23	4.88
The year	4,950	151	349	3.12	42.18

Estimated monthly discharge of Soque River near Demorest—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1906					
January	4,060	257	731	3.53	7.53
February	443	300	332	2.96	3.08
March	4,150	286	729	6.51	7.50
April	568	361	435	3.88	4.33
May	645	300	374	3.34	3.85
June	1,540	271	396	3.54	3.95
July	1,960	243	601	5.37	6.19
August	8,830	346	1,070	9.55	11.01
September	2,520	346	1,010	9.02	10.06
October	3,430	330	751	6.71	7.74
November	1,000	377	477	4.26	4.75
December	2,370	361	643	5.74	6.62
The year	8,830	257	629	5.62	76.61

SWEETWATER CREEK NEAR AUSTELL.[a]

This station was established May 6, 1904, by M. R. Hall. It is located at the south side of Lithia Springs Park, near Austell.

The channel is straight for about 300 feet above and 200 feet below the gage. The current is sluggish above the gage; below it is swift for about 50 feet at several places, with sluggish water between. Both banks are high and wooded, the right being composed of rock, and are not liable to overflow. There is but one channel at all stages. Discharge measurements are made from a boat at low and ordinary stages about 400 yards below the gage. High-water measurements are made from Strickland's wagon bridge, 1½ miles down stream.

The gage is in two sections: The first is an inclined staff, reading to 8 feet, fastened to solid rock on the right bank; the second is a vertical staff, reading from 8 to 16 feet, fastened to a maple tree on the right bank about 100 feet upstream. The gage is read twice each day by J. L. Causey. Bench marks are: (1) A nail in a small maple on the right bank about 200 feet below the gage; elevation, 5.00 feet. (2) A cross cut on a large rock about 10 feet south of the sloping section of the gage; elevation, 10.00 feet. Elevations refer to the datum of the gage.

a No monthly estimates have been attempted on account of the erratic plotting of the discharge measurements.

FOREST FALLS, NEAR WHIGHAM, GRADY COUNTY, GEORGIA.

Discharge measurements of Sweetwater Creek near Austell.

Date	Gage height	Discharge	Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*	1905	*Feet*	*Sec.-ft.*
May 6 *a*	1.68	122	January 18	3.02	227
June 16 *b*	1.15	61	January 18	3.01	220
June 16 *a*	1.20	64	March 7 *e*	2.80	200
July 9 *a*	1.40	85	May 10 *f*	2.13	147
July 29 *a*	2.70	254	May 10 *f*	2.10	136
August 30 *a*	2.35	178	August 16 *g*	4.44	448
August 31 *c*	1.96	122	August 16 *g*	4.44	438
October 1 *d*	1.24	61	October 7 *f*	1.91	123
October 1 *d*	1.28	60	October 7 *f*	1.89	119

a Strickland's bridge.
b Boat 100 yards below gage.
c Wading 100 yards below gage.
d 1,000 feet above gage.
e 1,000 feet below gage.
f At boat landing below gage.
g Measurement made one-third mile east of Austell, Ga.

Daily gage height, in feet, of Sweetwater Creek near Austell.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
1						3.4	1.9	1.5	1.9	0.9	0.9	1.65
2						2.5	1.45	1.6	1.7	.65	1.05	1.6
3						1.9	1.3	4.4	1.6	1.05	.95	1.8
4						1.6	1.25	2.9	3.0	.7	1.6	1.85
5						1.5	1.2	3.9	2.65	1.05	1.8	2.5
6						1.5	1.1	3.85	2.05	.75	1.7	3.65
7						1.95	1.05	2.3	1.7	.95	1.4	2.6
8						1.7	1.35	11.9	1.65	.9	1.35	2.25
9						1.45	1.35	16.3	1.6	.65	1.25	2.05
10						1.3	1.15	11.4	1.45	.9	1.25	2.05
11						1.2	1.1	4.95	1.4	.9	1.25	2.2
12						1.2	1.05	6.3	1.3	.85	1.3	2.0
13						1.1	1.15	4.3	1.25	.9	1.65	1.85
14						1.0	.9	3.45	1.25	.95	2.1	1.75
15						1.0	1.0	3.25	1.35	.85	1.75	1.75
16						1.15	1.05	4.55	1.1	.55	1.45	1.8
17						1.0	.55	3.2	.9	1.0	1.4	1.85
18					1.5	1.0	1.0	3.45	1.2	.7	1.35	1.75
19					1.5	1.0	.75	2.4	1.2	.7	1.45	1.8
20					1.45	1.9	.75	1.95	1.05	.85	1.4	1.65
21					1.45	2.8	.75	2.15	1.1	.7	1.45	1.65
22					1.35	3.5	.9	2.0	1.1	.75	1.8	1.6
23					1.3	2.15	1.15	1.95	1.0	.6	2.4	1.7
24					1.3	1.7	.7	2.65	1.15	1.0	2.0	1.65
25					1.25	1.3	1.05	4.05	1.0	.9	1.75	1.65
26					1.15	1.15	1.0	5.5	1.05	.9	1.6	1.65
27					1.2	1.2	.9	7.15	.85	.85	1.45	1.75
28					1.2	2.4	1.25	6.0	1.1	.85	1.6	3.45
29					1.15	5.6	2.5	3.1	1.05	.9	1.5	3.25
30					1.3	2.85	2.2	2.35	.95	.5	1.5	3.2
31					2.55		1.65	2.1		.95		2.5

Daily gage height, in feet, of Sweetwater Creek near Austell—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	2.1	3.0	3.1	2.35	2.75	1.75	4.0	1.8	1.85	7.2	1.85	2.05
2	2.05	2.6	3.0	2.35	2.35	1.7	3.6	1.65	1.95	5.4	1.7	2.45
3	2.1	2.45	3.0	2.35	2.45	1.6	2.55	1.65	2.1	2.8	1.55	9.6
4	2.05	2.55	2.8	2.3	2.55	1.6	2.2	1.65	3.3	2.45	1.75	12.9
5	2.0	2.45	2.8	2.55	2.35	1.65	5.6	1.5	2.7	2.35	1.75	6.7
6	3.3	2.5	2.8	2.9	2.45	1.55	4.6	1.4	2.55	2.05	1.75	4.0
7	2.8	2.55	2.8	2.8	2.1	1.35	7.0	1.7	1.65	1.85	1.75	3.6
8	2.75	4.4	2.8	2.75	2.15	1.45	11.6	1.45	1.55	1.7	1.8	5.8
9	2.55	7.2	2.85	2.8	2.4	1.25	8.6	1.8	1.55	1.6	1.8	10.2
10	2.3	10.2	3.4	2.65	2.1	1.25	8.8	3.1	1.6	1.65	2.6	11.6
11	2.8	8.6	4.0	2.6	1.95	1.05	9.2	3.4	1.1	2.4	3.4	10.4
12	11.2	6.0	4.1	2.6	1.75	1.0	16.7	4.7	1.65	2.35	3.0	6.4
13	14.4	6.5	3.6	2.5	1.65	1.15	10.7	3.2	1.65	2.2	2.5	4.0
14	11.4	6.3	3.2	2.4	1.65	1.45	5.1	4.4	1.7	2.0	2.2	3.4
15	4.7	6.4	3.0	2.55	1.7	1.55	3.4	3.9	1.35	1.95	2.1	3.5
16	3.4	6.0	2.9	2.8	2.35	1.55	2.9	4.4	1.35	2.0	2.0	3.5
17	3.5	5.6	2.8	2.55	4.0	1.45	2.65	3.9	1.45	2.1	1.95	3.6
18	3.0	5.3	2.75	2.5	2.7	1.35	2.3	3.8	1.6	1.4	1.95	3.5
19	3.0	5.2	2.7	2.4	2.05	1.5	2.25	3.6	1.5	1.8	1.95	3.6
20	3.2	6.6	2.85	2.4	1.9	1.95	2.3	2.8	1.4	1.7	2.0	5.2
21	3.0	7.1	3.7	2.3	1.85	1.4	2.1	2.65	1.35	1.75	1.95	6.4
22	2.8	6.9	3.7	2.2	2.45	1.7	2.1	2.85	1.25	1.65	2.05	6.1
23	2.45	5.5	3.1	2.2	2.9	2.3	1.85	3.9	1.25	1.65	1.9	5.7
24	2.4	4.4	2.85	2.2	5.1	2.7	1.75	5.8	1.4	1.65	1.95	5.2
25	2.2	3.7	2.55	2.15	4.5	2.5	2.35	6.5	1.4	1.85	2.1	4.9
26	2.1	3.4	2.5	2.2	3.3	2.1	2.4	4.1	1.35	2.4	2.5	4.4
27	2.25	3.2	2.5	2.2	2.7	2.35	1.9	2.8	1.3	2.4	2.65	4.0
28	2.2	3.2	2.45	2.1	2.4	3.0	1.75	2.05	1.15	2.2	2.6	3.6
29	2.25	.....	2.4	2.5	2.3	3.6	1.9	1.9	1.15	2.0	2.25	3.6
30	2.4	.....	2.5	2.6	2.3	2.7	2.15	1.7	1.65	1.8	2.02	3.4
31	3.2	.....	2.4	.....	2.0	.....	1.8	1.7	.....	1.75	.....	3.4

MULBERRY CREEK NEAR COLUMBUS.

This station was established June 23, 1904, by W. E. Hall. It is located at Mitchells Bridge, about 16 miles north of Columbus and 12 miles south of Hamilton. Mulberry Creek is a tributary of Chattahoochee River, entering it about 6 miles west of the station.

The channel is straight for about 50 feet above and 200 feet below the bridge. The current is rather sluggish above and swift below the station. Both banks are high and not liable to overflow; the right is clean; the left is wooded and covered with brush. The bed of the stream is composed of rock and sand, with but one channel at all stages, broken by one wooden pier. The bottom is very uneven, causing the current to change direction during low water. Discharge measurements are made from the downstream side of the two-span highway bridge, resting upon stone abutments and center wooden pile bent. The initial point for soundings is the left end of the bridge on the downstream side.

Gage heights are determined directly from the bench mark, which is the top of the downstream end of the wooden cap of center pile bent; elevation, 32.00 feet above the datum of the assumed gage.

Discharge measurements of Mulberry Creek near Columbus.

Date	Gage height	Discharge	Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*	1905	*Feet*	*Sec.-ft.*
June 23	1.40	58	June 17	1.63	77
September 21	1.23	32	June 17	1.63	82
September 21	1.23	33	September 26	1.00	16.6
			September 26	1.01	17.7

FLINT RIVER AT MOLINA.

In May, 1897, a station was established on Flint River at the bridge of the Georgia Midland division of the Southern Railway, about half-way from Atlanta to Columbus. The alternate filling and washing out of the sand in an eddy about one-half hile below the station so affected the stream that the fluctuations shown by the gage had no fixed relation to the quantity of water flowing in the river. After this fact developed the station was abandoned and re-established near Woodbury, at the Macon and Birmingham railroad bridge, about 3 miles lower down the river.

The following discharge measurements were made at the Molina station before it was abandoned. They are accurate, and as they are nearly distributed over a period of one year—from May, 1897, to May, 1898—they give a fair idea of the flow of the stream during that time. Measurement No. 5 shows the lowest discharge and is undoubtedly very near the minimum of this stream for 1897.

Discharge measurements of Flint River at Molina.

Date	Gage height	Discharge	Date	Gage height	Discharge
1897	*Feet*	*Sec.-ft.*	1898	*Feet*	*Sec.-ft.*
May 21	.....	641	February 28	.....	458
June 7	.....	707	April 21	.....	877
June 23	.....	697	May 28	.....	313
August 25	.....	2,843			
November 8	.....	264			
December 7	.....	588			

FLINT RIVER NEAR WOODBURY.

Measurements of the flow of Flint River were made during 1897 and 1898 at Molina, but the river bed was so shifting that the station was discontinued June 2, 1898. Two measurements were made in 1899 at the Macon and Birmingham Railroad bridge near Woodbury, 5 miles below the Molina station. March 29, 1900, a gage was put in near this bridge and the station was reestablished.

The channel above and below the station is slightly curved for 800 feet. Above gage height 10 feet the banks are subject to overflow for a width of 300 or 400 feet, but all water passes beneath the bridge and its approaches. The bridge and its piers are oblique to the direction of the current, and the bed is rough and irregular and mostly permanent.

Discharge measurements are made from the Macon and Birmingham Railroad bridge. This is a two-span iron bridge, each span being 150 feet long and supported by brick piers. There are wooden trestle approaches about 150 feet long on the right bank and 225 feet long on the left. The initial point for soundings is the end of the iron bridge on the right bank, downstream side.

The gage is in 5-foot sections; the part reading from zero to 10 feet is attached to a willow tree on the left bank about 300 feet above the bridge and 50 feet below Riggins's old ferry; the section reading from 10 to 15 feet is fastened to a sweetgum tree 50 feet from the left bank and 150 feet upstream from the bridge. This gage was maintained by the Georgia Geological Survey until November 1, 1900, when it was adopted by the United States Weather Bureau. The observer is G. A. Wright, who is paid by the Weather Bureau. Bench marks were established as follows: (1) The top of the downstream end of the second and third crossbeams from the left-bank end of the bridge; elevation, 27.00 feet; (2) a copper plug set in solid rock on the west side of the river about 100 feet from the water and 100 feet upstream from a point opposite the gage; elevation, 16.29 feet. Elevations refer to the datum of the gage, which is 660 feet above sea level.

Discharge measurements of Flint River near Woodbury.

Date	Gage height	Discharge	Date	Gage height	Discharge
1899	*Feet*	*Sec.-ft.*	1903	*Feet*	*Sec.-ft.*
June 29	0.80	590	June 29	1.48	1,591
August 29	.50	461	July 30	.37	503
1900			September 30	.28	387
March 29	2.20	2,329	1904		
May 2	2.85	3,220	February 11	2.81	3,095
December 12	.85	998	February 23	3.30	4,114
December 21	4.35	5,423	March 30	.74	620
1901			July 7	.00	256
February 4	4.02	4,901	August 25	.30	333
March 5	1.18	985	October 4 *b*	— .25	178
May 17	.82	565	1905		
August 15	.90	813	March 10	.91	844
September 6	.60	582	April 21	.52	544
1902			June 3	.08	307
June 30	.00	292	September 19	— .28	173
July 16	1.20	1,226	1906		
July 31	.12	329	February 10	1.40	1,440
October 6	1.45	1,520	April 12	1.22	1,180
1903			May 29	.52	564
April 22	2.45	2,679	June 18	2.13	2,260
February 12 *a*	9.20	16,290	September 11	1.06	937
March 26	5.45	8,861	November 15	.93	776

a This is a flood measurement, stage being high for this station. Results considered fairly accurate.

b Taken from boat one-half mile above bridge.

Daily gage height, in feet, of Flint River near Woodbury.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900												
1	.....	.....	.....	1.3	1.9	0.6	2.9	2.5	0.4	0.2	0.4	0.7
2	.....	.....	.....	1.2	1.5	.5	2.8	1.7	.7	.1	1.2	.6
3	.....	.....	.....	1.2	1.3	.6	4.5	1.2	.6	.2	2.0	.5
4	.....	.....	.....	1.1	1.4	1.0	4.3	1.0	.4	.5	3.3	1.3
5	.....	.....	.....	1.1	1.2	1.4	3.7	1.2	.3	1.5	2.8	2.3
6	.....	.....	.....	1.1	1.0	1.6	2.4	.3	.2	1.3	1.3	2.1
7	.....	.....	.....	1.0	.9	1.5	1.3	.6	.2	1.2	1.0	1.3
8	.....	.....	.....	1.0	.8	1.4	1.4	.5	.2	1.0	.8	1.4
9	.....	.....	.....	1.0	.7	1.3	1.1	.4	.1	1.3	.7	1.3
10	.....	.....	.....	1.2	.8	1.3	1.0	.4	.1	.7	.6	1.0
11	.....	.....	.....	1.3	.6	1.6	.9	.3	.2	.5	.5	.9
12	.....	.....	.....	2.1	.7	1.0	1.6	.3	.2	.5	.6	.8
13	.....	.....	.....	2.4	.7	.7	1.5	.7	.1	.6	.5	.8
14	.....	.....	.....	2.1	.6	.6	1.6	.4	.1	.6	.5	2.4
15	.....	.....	.....	1.6	.6	.5	1.3	.3	1.3	.5	.5	3.3
16	.....	.....	.....	1.4	.5	1.0	1.0	.4	1.6	.4	.4	2.7
17	.....	.....	.....	1.2	.6	4.1	.3	.4	1.5	.4	.5	2.1
18	.....	.....	.....	2.0	.5	4.0	.7	.5	1.3	.3	.5	1.6
19	.....	.....	.....	4.6	1.0	3.8	.6	.4	1.1	.2	.6	1.3
20	.....	.....	.....	5.2	.8	6.0	.5	.3	.8	.2	.5	2.1
21	.....	.....	.....	5.8	.7	5.0	.3	.3	.4	.3	.6	4.3
22	.....	.....	.....	5.0	.6	2.4	.6	.2	.3	.3	.7	3.9
23	.....	.....	.....	2.8	.5	2.0	.5	.1	.3	.6	.6	3.5
24	.....	.....	.....	2.6	1.0	9.0	1.1	.2	.2	.9	.7	2.8
25	.....	.....	.....	2.4	1.5	8.5	.8	.1	.3	1.0	.7	2.1
26	.....	.....	.....	2.2	1.3	8.0	1.0	.3	.2	1.1	1.5	1.7
27	.....	.....	.....	1.9	.9	7.0	1.2	.3	.2	.7	1.6	1.4
28	.....	.....	.....	1.7	.7	5.9	1.2	.2	.2	.5	1.2	1.3
29	.....	.....	2.2	1.5	.6	5.1	1.6	.2	.2	.4	1.0	1.2
30	.....	.....	1.9	1.2	.5	4.1	2.4	.3	.1	.4	.8	1.3
31	.....	.....	1.6	.....	.5	.....	3.0	.4	.....	.3	.....	2.2
1901												
1	2.7	1.7	1.3	5.0	1.1	2.7	2.1	.8	1.0	.9	.4	.6
2	3.7	1.6	1.2	4.4	1.0	3.0	1.6	.7	1.1	1.4	.5	.7
3	4.7	1.5	1.2	7.6	1.0	2.8	1.5	.7	.9	2.7	.5	.9
4	4.4	3.7	1.2	6.4	1.0	2.5	1.2	.5	.8	1.7	.6	1.0
5	3.5	4.8	1.1	5.2	.9	1.9	.9	.4	.6	1.1	.5	1.1
6	2.6	5.4	1.1	3.7	.9	1.6	.9	1.0	.6	1.1	.5	.9
7	2.1	4.3	1.0	2.6	.8	1.3	1.6	1.5	.5	.8	.6	.8
8	1.8	3.0	1.0	2.1	.9	2.6	1.1	1.2	.5	.7	.6	.7
9	1.6	3.4	1.0	1.8	.8	3.2	1.1	.9	.5	.6	.5	.8
10	1.5	3.3	1.2	1.6	.8	1.8	1.0	.7	.4	.7	.5	.7
11	1.6	2.8	2.0	1.5	.7	1.4	.8	.6	.4	.6	.6	1.1
12	3.3	2.4	1.8	1.4	.7	1.1	.6	.8	.4	.6	.5	1.0
13	4.2	2.2	1.5	1.6	.8	1.2	.5	.9	.5	.5	.6	.9
14	4.5	2.0	1.4	2.1	1.0	2.1	.4	.7	.8	.7	.6	.8
15	3.9	1.7	1.2	2.0	1.1	1.8	.4	.9	1.0	.6	.6	.9
16	2.9	1.6	1.1	1.9	.9	1.7	.6	1.8	1.2	.5	.5	3.1
17	4.2	1.5	1.0	1.7	.8	1.6	.8	3.0	.9	.6	.6	2.2
18	3.4	1.4	1.0	1.6	.9	1.5	1.0	2.5	3.4	.5	.5	1.5
19	2.3	1.4	1.0	2.8	.8	1.2	1.4	2.0	4.6	.5	.6	1.2
20	2.0	1.3	1.1	2.9	1.2	1.1	.9	1.7	4.8	.4	.7	1.0
21	1.7	1.3	1.2	2.7	3.1	.9	.9	1.9	3.1	.4	.8	.8
22	1.6	1.3	1.2	2.3	9.0	.8	.8	2.5	1.9	.5	.8	.7
23	1.5	1.4	1.1	1.9	10.0	1.2	.8	6.1	1.2	.5	.7	.8
24	1.4	1.5	1.6	1.7	8.0	1.4	.5	8.0	.9	.4	.6	1.1
25	1.7	1.5	1.7	1.4	5.0	1.0	.4	7.0	.8	.5	.5	1.2
26	1.6	1.6	4.2	1.3	2.8	.8	.4	5.6	.7	.4	.6	1.3
27	1.5	1.5	4.9	1.3	2.0	.7	.4	3.2	.7	.4	.7	1.2
28	1.6	1.4	3.6	1.2	1.6	1.0	.5	4.1	.8	.5	.6	1.5
29	1.6	.....	2.8	1.2	1.4	1.3	.7	2.9	.8	.4	.6	6.2
30	1.5	.....	2.1	1.1	1.3	1.5	.7	2.0	1.0	.4	.5	10.6
31	1.8	.....	5.6	.....	1.7	.....	.6	1.3	.....	.3	.....	10.0

Daily gage height, in feet, of Flint River near Woodbury—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1902												
1	8.0	3.2	12.0	4.6	1.0	.4	.1	.1	.4	1.4	1.2	1.8
2	5.0	8.5	1.0	2.9	1.0	.5	.0	.1	.3	1.2	.5	1.7
3	2.9	11.0	9.5	2.3	.9	.8	.0	.0	.2	.9	.4	2.3
4	2.0	9.5	5.4	2.0	.8	.6	.2	.2	.3	.6	.3	3.2
5	1.6	8.0	3.0	1.9	.8	.5	.1	.7	.7	1.1	.4	3.0
6	1.4	3.6	2.5	1.8	.7	.4	.1	1.5	.4	1.6	.5	2.3
7	1.3	2.5	2.3	1.7	.7	.3	.1	1.1	.2	.8	.9	1.6
8	1.2	2.0	2.1	2.8	.7	1.8	.2	.6	.1	.4	1.3	1.3
9	1.2	1.7	1.9	2.7	1.2	.9	.1	.3	.2	.3	.9	1.2
10	1.1	1.6	1.8	2.3	.9	.6	.2	.2	.3	.2	.6	.9
11	1.2	1.5	1.7	1.9	.8	.5	.3	.1	.4	.4	.5	.8
12	1.1	1.4	1.6	1.7	.7	.4	1.9	.3	.2	.6	.4	.9
13	1.0	1.3	1.6	1.5	.6	.3	1.0	.6	.1	.5	.4	1.0
14	.9	1.3	2.0	1.5	.8	.3	.6	.3	.1	.4	.3	.9
15	1.0	1.6	2.3	1.6	.7	.4	.7	.2	.1	.3	.3	.8
16	1.0	1.8	2.8	1.5	1.7	1.0	1.3	.4	.0	.3	.2	1.0
17	1.0	1.8	10.0	1.6	2.3	.8	.7	.2	.0	.2	.4	2.0
18	1.0	1.6	9.0	2.8	1.7	.6	.3	.1	.1	.2	.9	2.9
19	1.0	1.5	6.7	2.4	1.4	.5	.2	.0	.1	.1	.8	3.0
20	1.1	1.6	4.0	1.9	1.2	.4	.1	.0	.0	.1	.8	2.0
21	1.2	1.9	2.5	1.6	.9	.3	.0	.0	.0	.2	.7	1.4
22	1.6	1.8	2.3	1.4	.8	.3	.1	.5	.0	.2	.6	1.5
23	1.5	1.7	2.1	1.3	.7	.3	.1	.2	.0	.1	.5	1.6
24	1.3	1.6	2.0	1.2	.6	.2	.0	.1	.0	.1	.4	1.4
25	1.2	2.0	2.7	1.3	.6	.2	.0	.0	1.5	.0	.4	1.3
26	1.3	2.5	2.5	1.4	.5	.1	.0	.0	1.6	.2	2.9	1.2
27	1.2	2.6	2.4	1.3	1.6	.1	.0	.0	1.5	1.0	2.8	1.1
28	1.2	14.0	4.5	1.2	.5	.1	.0	.5	1.4	1.5	2.0	1.0
29	1.3	.....	8.0	1.1	.4	.1	.1	1.3	1.3	2.0	1.5	1.1
30	1.2	.....	8.5	1.1	.4	.0	.2	1.2	1.8	1.7	1.0	1.2
31	1.5	.....	6.8	.....	.3	.....	.1	.4	.....	1.4	.....	1.3
1903												
1	1.2	1.0	4.7	4.5	1.0	1.2	1.0	.6	.1	.2	.3	.3
2	1.1	.9	3.7	3.9	.9	1.5	.9	.7	.2	.2	.4	.3
3	1.0	.9	2.9	3.0	1.0	1.3	2.5	.8	.1	.2	.3	.3
4	1.2	1.0	3.0	2.7	1.1	1.4	1.1	1.0	.0	.2	.4	.4
5	1.1	1.2	4.2	2.3	1.0	2.2	.9	1.5	.2	.2	.5	.4
6	1.0	1.2	3.6	2.0	.9	2.5	.8	2.5	.1	.1	.6	.4
7	.9	1.5	2.9	1.7	2.0	2.9	2.0	1.4	.1	.2	.5	.6
8	.8	13.0	2.4	1.8	1.9	2.8	1.2	1.0	.0	.5	.4	.5
9	.7	11.5	2.2	2.2	1.8	2.4	1.3	.8	.0	.3	.4	.6
10	.6	10.0	2.4	2.1	1.5	2.2	1.0	1.3	.0	.5	.3	.9
11	.6	9.0	3.0	2.3	1.3	1.5	.9	.9	.0	.3	.4	.8
12	.5	9.5	3.1	2.2	1.0	1.2	.8	.5	.0	.3	.4	.7
13	1.5	7.5	2.6	3.1	1.1	.9	1.7	.6	.0	.2	.5	.6
14	1.2	5.7	2.0	2.9	1.3	.6	2.8	.8	.2	.2	.4	.8
15	1.1	3.8	2.1	2.5	4.6	.3	2.4	.9	5.3	.1	.4	.7
16	1.0	2.7	1.9	2.2	6.0	.5	2.0	1.0	5.9	.2	.5	.6
17	.9	7.0	1.8	1.9	4.1	.6	1.6	1.2	4.2	.6	.5	.5
18	.8	6.4	1.7	1.7	2.7	.5	1.0	2.7	2.7	1.1	.8	.5
19	.7	5.4	1.6	1.4	1.8	.5	.6	6.0	1.6	.7	.7	.4
20	.8	3.9	1.5	2.1	1.5	.5	1.0	3.6	1.2	.5	.6	.6
21	.9	2.7	1.4	2.9	1.3	.4	.6	2.0	.8	.4	.5	.9
22	.8	2.0	1.8	2.5	1.2	.5	.4	1.4	.7	.4	.6	.9
23	.7	1.7	5.6	1.9	1.1	.5	.2	1.1	.6	.3	.5	.8
24	.8	1.5	7.5	1.5	1.0	.5	.1	.9	.5	.3	.5	.7
25	.9	1.4	5.8	1.3	.9	.4	.2	.5	.4	.2	.4	.6
26	.9	1.3	5.8	2.2	.8	.5	.8	.4	.4	.3	.5	.5
27	.8	1.4	3.7	2.0	.7	1.9	.6	.2	.3	.2	.4	.4
28	1.4	3.0	2.2	1.5	.6	1.5	.4	.3	.4	.2	.4	.8
29	1.5	.....	2.5	1.2	.8	1.6	.3	.2	.3	.3	.4	.7
30	1.3	.....	4.5	1.1	.9	1.3	.2	.1	.3	.3	.4	.7
31	1.1	.....	4.9	.....	.8	.....	.5	.3	.....	.2	.....	.6

Daily gage height, in feet, of Flint River near Woodbury—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
1	0.5	0.9	1.2	0.7	0.4	1.1	0.3	0.4	0.2	—0.25	—0.35	0.1
2	.5	.9	1.3	.6	.4	1.0	.2	1.3	.1	— .3	— .3	.2
3	.6	.8	1.5	.7	.5	.8	.1	1.1	.1	— .3	— .2	.3
4	.7	.7	1.6	.6	.6	.5	.1	1.2	.5	— .3	.0	.4
5	.6	.8	2.0	.6	.5	.3	.0	2.2	.8	— .3	.0	.5
6	.5	.7	2.5	.7	.5	1.0	.0	2.1	.7	— .35	.1	.9
7	.6	.8	2.3	.8	.4	.8	.0	2.2	.3	— .35	.0	.9
8	.7	2.6	2.2	.9	.3	.6	— .05	8.7	.2	— .4	.0	.7
9	.6	2.5	2.1	1.9	.2	.5	.1	6.5	.2	— .4	— .1	.5
10	.8	2.3	1.9	1.4	.3	.4	.1	5.0	.1	— .4	— .05	.5
11	1.2	2.8	1.5	1.0	.3	.4	.6	5.0	.0	— .35	— .05	.4
12	1.0	2.5	1.3	.8	.3	.0	.3	3.5	.0	— .35	— .05	.3
13	.9	2.2	1.1	.7	.2	.0	.2	3.0	.0	— .4	.1	.3
14	.8	2.0	1.2	.6	.1	.0	.2	1.2	— .05	— .4	.2	.3
15	.7	1.7	1.4	.6	.2	— .05a	.0	1.5	— .1	— .4	.2	.3
16	.8	1.4	1.2	.6	.2	— .05	— .05	1.4	— .1	— .4	.1	.3
17	1.3	1.2	1.0	.5	.1	— .05	— .1	.9	— .1	— .45	.1	.3
18	1.5	1.1	1.0	.5	.2	— .05	— .1	.5	— .1	— .45	.1	.2
19	1.4	1.2	.9	.4	.1	— .05	.1	.5	— .15	— .4	.1	.2
20	1.2	1.4	.9	.5	.1	— .05	.1	.4	— .2	— .4	.0	.2
21	1.0	1.5	.8	.4	.1	— .05	— .05	.3	— .15	— .45	.0	.2
22	1.1	2.6	.9	.4	.0	— .05	.2	.3	— .15	— .45	.1	.3
23	3.2	3.0	.9	.5	.0	— .05	.1	.3	— .2	— .45	.1	.2
24	3.0	2.9	.9	.4	.0	— .05	.3	.4	— .25	— .5	.2	.2
25	2.7	2.5	.8	.5	.0	— .05	1.0	.3	— .15	— .45	.2	.4
26	1.9	2.0	.9	.4	.0	.0	.4	.7	— .3	— .4	.1	.5
27	1.5	1.9	.9	.5	.0	.0	.2	.1	— .2	— .35	.1	.6
28	1.2	1.4	.8	.4	.0	.0	.1	.3	— .2	— .4	.1	1.3
29	1.1	1.2	.9	.4	.0	.4	.0	.6	— .25	— .35	.1	1.5
30	1.0	.....	.8	.5	.0	.4	.1	.5	— .25	— .35	.1	1.3
31	.9	.....	.8	.....	1.0	.....	.2	.3	.....	— .4	.....	1.1
1905												
1	.9	.5	1.0	.6	.7	.1	1.7	.1	.0	.3	.2	.4
2	.6	.5	.9	.5	.6	.1	2.6	.0	.0	.6	.1	.3
3	.7	.4	.8	.5	.7	.2	2.6	— .1	.2	.4	.1	2.9
4	.6	.4	.7	.5	1.2	.1	1.5	— .1	.6	.6	.1	4.0
5	.5	.5	.6	1.0	1.4	.2	1.3	— .2	.6	.7	.1	5.0
6	.5	.6	.8	1.2	1.3	.1	1.0	— .2	.3	.4	.0	4.4
7	.6	1.0	.8	1.1	.9	.0	.6	— .3	.3	.2	.1	3.4
8	.7	1.9	.8	1.0	.6	.0	.7	.2	.1	.0	.1	2.1
9	.6	3.0	.8	.9	.8	— .1	.6	.5	.0	— .1	.1	2.7
10	.5	3.2	.9	1.1	.8	— .1	.5	2.2	— .1	.0	.2	2.9
11	.4	2.7	1.0	1.1	.7	— .2	.9	2.3	— .2	.1	.9	3.0
12	.9	3.5	1.1	1.0	.5	— .2	1.2	2.3	— .2	.3	1.1	2.7
13	2.1	5.4	1.3	1.1	.4	— .1	1.2	2.1	.0	.4	1.0	2.1
14	2.0	6.3	1.2	1.0	.3	.1	.7	2.0	.0	.4	.8	1.7
15	1.9	4.9	1.0	.8	.3	.3	.6	1.8	— .1	.3	.6	1.5
16	1.6	3.5	.9	.8	.4	.5	.5	2.6	— .2	.3	.5	1.5
17	1.3	2.5	.9	.8	.5	.2	.4	3.9	— .2	.2	.4	1.4
18	1.0	2.1	.8	.7	.5	.1	.2	2.6	— .3	.1	.3	1.3
19	.8	1.7	.7	.6	.3	.1	.1	1.5	— .3	.1	.2	1.2
20	.8	1.5	.6	.6	.2	.0	.4	.8	— .3	.1	.2	2.5
21	.8	2.0	1.0	.6	.3	.0	.1	.6	— .3	.0	.2	5.3
22	.7	2.0	1.1	.5	.4	.1	.3	.4	— .4	.0	.1	5.4
23	.6	1.8	1.3	.5	.4	.3	.0	.3	— .4	.0	.1	4.8
24	.6	1.7	1.2	.5	.3	.4	— .1	.4	— .4	.0	.2	4.5
25	.5	1.5	1.0	.5	.7	.4	.3	1.2	— .5	— .1	.2	2.8
26	.4	1.3	.8	.4	.5	.2	.1	1.0	— .5	.3	.2	2.2
27	.4	1.1	.7	.4	.4	.2	.0	.9	— .4	.6	.2	1.7
28	.3	1.0	.7	.4	.3	.1	.1	.7	— .4	.5	.2	1.6
29	.3	.....	.6	.5	.3	.2	.3	.3	— .4	.3	.2	1.5
30	.4	.....	.6	.6	.2	.3	.1	.1	— .2	.3	.3	1.4
31	.5	.....	.5	.....	.2	.....	.1	.1	.....	.2	.....	1.3

a June 15 to 25 observer reported "below zero," but stated afterwards that he did not think it went as much as 1 tenth below.

Daily gage height, in feet, of Flint River near Woodbury—Continued.

Day	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
1	1.8	1.6	0.8	2.5	0.5	0.3	0.2	1.3	0.9	1.6	0.6	0.7
2	1.3	1.5	.9	2.1	.5	.3	1.0	1.0	.9	2.1	.7	.7
3	1.7	1.4	1.1	1.8	.5	.3	.4	1.0	1.3	2.5	.7	.7
4	4.5	1.2	1.5	1.6	.8	.4	1.5	1.1	.9	2.6	.6	.7
5	4.7	1.2	1.4	1.4	1.2	.6	1.0	3.5	.8	2.2	.6	.6
6	4.9	1.2	1.1	1.3	1.1	.5	.6	3.3	3.6	3.0	.6	.7
7	4.0	1.3	1.0	1.2	1.0	.3	.4	1.9	2.7	2.3	.6	.6
8	2.9	1.4	1.9	1.2	1.4	.2	.5	1.7	1.1	1.6	.6	.7
9	2.0	1.5	3.2	1.2	1.3	.2	1.3	1.7	.8	1.0	.5	.8
10	1.7	1.5	3.2	1.5	1.1	.5	1.5	1.3	1.2	.8	.6	.8
11	1.5	1.4	2.8	1.4	.9	.3	1.0	1.1	1.0	.7	.6	.9
12	1.7	1.2	2.2	1.3	.8	.2	3.6	1.2	1.0	.6	.6	1.0
13	1.8	1.2	1.8	1.1	.6	4.3	2.3	1.2	1.4	.6	.6	1.0
14	1.8	1.2	1.5	1.0	.6	5.9	1.6	2.1	1.3	.5	.5	.9
15	1.7	1.3	2.8	1.3	.5	6.2	1.8	2.9	.8	.5	.9	.9
16	1.5	1.2	3.9	1.2	.5	6.2	1.5	3.5	.6	.5	1.0	.8
17	1.4	1.1	3.9	1.0	.4	4.5	1.2	2.1	.5	.5	.9	.8
18	1.3	1.0	3.5	.9	.4	2.5	1.2	1.0	.4	1.3	1.7	1.1
19	1.3	1.0	3.0	.9	.4	1.7	2.3	1.2	.8	3.8	2.4	1.2
20	1.3	1.0	7.5	.8	.3	1.7	2.1	.8	1.4	3.1	2.0	1.6
21	1.3	1.0	7.8	.8	.4	1.2	1.7	.6	1.4	2.9	1.7	1.7
22	2.7	1.1	7.3	.8	.4	.8	1.1	.8	1.8	1.8	1.3	1.6
23	4.7	1.1	5.2	.7	.4	.7	2.6	1.7	1.6	1.5	1.1	1.3
24	6.3	1.0	2.9	.7	.4	.6	3.1	2.7	1.5	1.2	1.0	1.1
25	5.6	1.0	2.1	.6	.3	.5	2.5	1.2	1.4	1.0	.9	1.0
26	3.7	.9	1.7	.6	.4	.4	1.7	.9	1.5	.9	.8	.9
27	3.0	.9	1.6	.6	.6	.4	1.8	1.1	1.2	.9	.8	.8
28	2.6	.9	2.3	.6	.6	.4	1.7	1.8	1.0	.8	.8	.9
29	2.3	.....	3.1	.5	.5	.3	1.1	1.5	1.0	.7	.7	1.2
30	2.0	.....	3.6	.6	.5	.3	1.7	3.0	.8	.7	.7	1.4
31	1.8	.....	2.9	.....	.4	.....	1.4	1.4	.....	.7	.....	2.2

Rating tables for Flint River near Woodbury.

APRIL 1, 1900, TO DECEMBER 31, 1901.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.00	350	1.10	890	2.20	2,340	3.30	3,880
.10	370	1.20	1,000	2.30	2,480	3.40	4,020
.20	400	1.30	1,120	2.40	2,620	3.50	4,160
.30	430	1.40	1,245	2.50	2,760	3.60	4,300
.40	460	1.50	1,370	2.60	2,900	3.70	4,440
.50	495	1.60	1,500	2.70	3,040	3.80	4,580
.60	530	1.70	1,640	2.80	3,180	3.90	4,720
.70	585	1.80	1,780	2.90	3,320	4.00	4,860
.80	650	1.90	1,920	3.00	3,460	4.10	5,000
.90	720	2.00	2,060	3.10	3,600		
1.00	800	2.10	2,200	3.20	3,740		

JANUARY 1, 1902, TO DECEMBER 31, 1903.[b]

0.00	290	1.80	1,920	3.60	4,240	6.80	10,260
.10	320	1.90	2,040	3.70	4,390	7.00	10,750
.20	360	2.00	2,160	3.80	4,540	7.20	11,250
.30	410	2.10	2,280	3.90	4,690	7.40	11,750
.40	470	2.20	2,400	4.00	4,840	7.60	12,250
.50	540	2.30	2,520	4.20	5,160	7.80	12,750
.60	620	2.40	2,640	4.40	5,480	8.00	13,250
.70	705	2.50	2,760	4.60	5,820	8.20	13,750
.80	800	2.60	2,890	4.80	6,160	8.40	14,250
.90	900	2.70	3,020	5.00	6,520	8.60	14,750
1.00	1,005	2.80	3,150	5.20	6,880	8.80	15,250
1.10	1,115	2.90	3,280	5.40	7,260	9.00	15,750
1.20	1,225	3.00	3,410	5.60	7,640	10.00	18,250
1.30	1,340	3.10	3,545	5.80	8,040	11.00	21,250
1.40	1,455	3.20	3,680	6.00	8,450	12.00	23,750
1.50	1,570	3.30	3,820	6.20	8,880	13.00	26,250
1.60	1,685	3.40	3,960	6.40	9,320	14.00	28,750
1.70	1,800	3.50	4,100	6.60	9,780	15.00	31,250

[a] Between gage height 1.60 and 4.10 feet the rating curve is a tangent, the difference being 140 per tenth. Above gage height 4.10 the 1902 curve has been used to obtain revised estimates for 1900 and 1901.

[b] Above gage height 6.80 feet the rating curve is a tangent, the difference being 250 per tenth.

Rating tables for Flint River near Woodbury—Continued.

JANUARY 1, 1904, TO DECEMBER 31, 1905.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
— 0.50	120	— .30	180	— .10	240	.10	320
— .40	150	— .20	200	.00	280		

a Above gage height 0.10 feet this table is the same as the 1903 table.

JANUARY 1 TO DECEMBER 31, 1906.

0.00	280	1.10	1,050	2.20	2,220	3.60	4,160
.10	320	1.20	1,140	2.30	2,340	3.80	4,480
.20	370	1.30	1,230	2.40	2,460	4.00	4,800
.30	420	1.40	1,320	2.50	2,590	4.20	5,140
.40	480	1.50	1,420	2.60	2,720	4.40	5,480
.50	540	1.60	1,520	2.70	2,860	4.60	5,820
.60	610	1.70	1,630	2.80	3,000	4.80	6,160
.70	690	1.80	1,740	2.90	3,140	5.00	6,520
.80	780	1.90	1,860	3.00	3,290	6.00	8,450
.90	870	2.00	1,980	3.20	3,560	7.00	10,750
1.00	960	2.10	2,100	3.40	3,850	8.00	13,250

NOTE.—The above table is based on discharge measurements made during 1904-1906, and is fairly well defined below gage height 5 feet.

Estimated monthly discharge of Flint River near Woodbury.

[Drainage area, 988 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1900					
April	8,040	800	2,244	2.27	2.53
May	1,920	490	757	.77	.89
June	15,750	490	4,127	4.18	4.66
July	5,650	490	1,690	1.70	1.96
August	2,760	370	611	.62	.71
September	1,500	370	557	.56	.62
October	1,780	370	641	.65	.75
November	3,880	460	911	.92	1.03
December	5,320	490	1,923	1.95	2.25
1901 a					
January	5,990	1,245	2,814	2.85	3.29
February	7,260	1,120	2,416	2.45	2.55
March	7,640	800	1,799	1.82	2.10
April	12,250	890	2,951	2.99	3.34
May	18,250	580	2,670	2.70	3.11
June	3,740	580	1,617	1.64	1.83
July	2,200	460	780	.79	.91
August	13,250	460	2,657	2.69	3.10
September	6,160	460	1,259	1.27	1.42
October	3,040	430	679	.69	.80
November	650	460	526	.53	.59
December	19,750	530	2,379	2.41	2.78
The year	19,750	430	1,879	1.90	25.82
1902					
January	13,250	900	1,891	1.91	2.20
February	30,250	1,340	5,143	5.21	5.43
March	24,250	1,685	6,721	6.80	7.84
April	5,820	1,115	2,042	2.07	2.31
May	2,520	410	934	.95	1.10
June	1,920	290	552	.56	.62
July	2,040	290	470	.48	.55
August	1,570	290	512	.52	.60
September	1,920	290	609	.62	.69
October	2,160	290	752	.76	.88
November	3,280	360	900	.91	1.02
December	3,680	800	1,676	1.70	1.96
The year	30,250	290	1,850	1.87	25.20

a Estimates above gage height 4.1 feet have been revised on the basis of the 1902 rating curve.

Estimated monthly discharge of Flint River near Woodbury—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1903					
January	1,570	540	977	.99	1.14
February	25,750	900	6,508	6.59	6.86
March	12,000	1,455	3,915	3.96	4.57
April	5,650	1,115	2,460	2.49	2.78
May	8,450	620	1,755	1.78	2.05
June	3,280	410	1,315	1.33	1.48
July	3,150	320	1,107	1.12	1.29
August	8,450	320	1,363	1.38	1.59
September	8,240	290	1,203	1.22	1.36
October	1,115	320	451	.46	.53
November	800	410	985	1.00	1.12
December	900	410	629	.64	.74
The year	25,750	290	1,889	1.91	25.51
1904					
January	3,680	540	1,207	1.22	1.41
February	3,410	705	1,838	1.86	2.01
March	2,760	800	1,326	1.34	1.55
April	2,040	470	687	.695	.775
May	1,005	280	394	.399	.460
June	1,115	280	442	.447	.499
July	1,005	240	368	.372	.429
August	15,000	320	2,198	2.22	2.56
September	800	180	302	.306	.341
October	195	120	155	.157	.181
November	360	165	295	.299	.334
December	1,570	320	586	.593	.684
The year	15,000	120	816	.826	11.23
1905					
January	2,280	410	837	.847	.976
February	9,100	470	2,454	2.48	2.58
March	1,340	540	885	.896	1.03
April	1,225	470	751	.760	.848
May	1,455	360	627	.635	.732
June	540	210	334	.338	.377
July	2,890	240	789	.799	.921
August	4,690	180	1,164	1.18	1.36
September	620	120	251	.254	.283
October	800	240	412	.417	.481
November	1,115	280	446	.451	.503
December	7,260	410	3,016	3.05	3.52
The year	9,100	120	997	1.01	13.61
1906					
January	9,100	1,230	2,950	2.98	3.44
February	1,520	870	1,130	1.14	1.19
March	12,800	780	3,520	3.56	4.10
April	2,590	540	1,080	1.09	1.22
May	1,320	420	663	.670	.77
June	8,890	370	1,810	1.83	2.04
July	4,160	370	1,540	1.56	1.80
August	4,000	610	1,690	1.71	1.97
September	4,160	480	1,210	1.22	1.36
October	4,480	540	1,500	1.52	1.75
November	2,460	540	893	.902	1.01
December	2,220	610	978	.988	1.14
The year	12,800	370	1,580	1.60	21.79

NOTE.—Values for 1906 are excellent.

FLINT RIVER NEAR MONTEZUMA.

This station is located at the iron highway bridge about 1 mile west of Montezuma. Some discharge measurements had already been made at this point when the United States Weather Bureau established a standard chain gage on the bridge, late in 1904. During 1905 the daily gage heights were furnished by the Weather Bureau.

The channel is slightly curved above and below the station, which is near the point of reverse between the curves. The current is moderate. The right bank, which is mostly covered with a dense growth of brush, will overflow for a great distance at about 12 feet above low water; the left bank is not apt to overflow. The bed is sandy and probably shifting and the current is slow at low stage, especially near the left bank.

Discharge measurements are made from the bridge of two 100-foot spans, with a short trestle approach on the left bank and a very long one across the marshy ground on the right bank. The initial point for soundings is the end of the left-bank approach, downstream side.

The gage is located on the upstream side of the right span of the bridge near the middle pier. The bench mark is the top of the upstream tubular pier at the middle of the bridge; elevation, 28.00 feet above the datum of the gage.

Discharge measurements of Flint River near Montezuma.

Date	Width	Area of section	Gage height	Discharge
	Feet	*Sq. ft.*	*Feet*	*Sec.-ft.*
1901				
July 18	178	1,960	4.88	2,400
1904				
September 21	188	1,300	1.85	971
1905				
August 23	198	1,550	3.15	1,610
August 31	198	1,390	2.41	1,250
October 12	196	1,330	2.25	1,150
1906				
April 11	202	2,200	6.38	3,420
June 16	225	3,260	11.92	8,110
November 30	196	1,490	3.94	1,960

Daily gage height, in feet, of Flint River near Montezuma.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	5.1	3.2	6.0	4.3	3.6	4.0	3.3	1.8	2.3	1.8	2.1	2.4
2	4.4	3.2	5.8	4.0	3.6	3.5	5.1	1.9	3.3	4.1	2.1	2.3
3	4.1	3.2	5.6	4.0	4.5	3.0	6.5	1.9	4.6	4.0	2.0	2.6
4	4.7	3.2	5.5	4.0	5.3	3.0	7.5	1.8	4.2	3.2	2.0	3.9
5	3.4	3.2	5.1	4.0	6.0	3.0	7.5	1.7	4.0	3.3	2.0	7.0
6	3.4	3.5	5.0	4.3	5.7	3.2	5.8	1.6	3.8	3.0	2.0	8.2
7	3.5	3.7	5.0	4.8	5.6	2.9	5.0	1.5	3.4	3.4	2.0	9.0
8	3.6	5.4	4.8	5.2	6.3	2.7	3.9	1.4	3.2	2.9	2.0	9.7
9	3.6	7.4	4.7	5.0	6.2	2.4	3.2	1.3	2.5	2.4	1.9	9.9
10	3.6	9.2	4.7	4.9	5.7	2.2	2.5	2.3	2.0	2.2	2.0	8.8
11	3.5	10.5	6.0	4.7	4.8	2.2	2.5	5.2	1.8	2.0	2.6	8.7
12	3.4	12.0	6.4	4.5	4.3	2.0	3.0	6.6	1.7	2.2	4.1	8.5
13	4.0	14.0	6.7	5.6	3.9	2.0	4.0	7.0	1.6	2.4	4.7	8.6
14	4.6	15.0	8.2	7.6	3.5	2.1	4.4	7.6	2.7	2.4	4.6	8.2
15	7.6	17.3	8.6	8.5	3.2	2.3	4.0	8.2	2.9	2.2	4.6	7.0
16	7.2	17.1	6.7	7.1	3.2	2.4	3.7	7.7	2.3	2.1	4.0	6.2
17	6.4	15.5	6.0	5.7	5.1	2.5	3.0	7.4	1.9	2.1	3.2	5.6
18	5.7	13.9	5.5	5.0	6.6	3.1	2.8	7.1	1.6	2.2	2.9	5.5
19	5.0	12.5	5.2	4.7	5.6	3.2	2.5	7.7	1.5	2.1	2.5	5.4
20	5.0	10.0	5.0	4.3	4.8	2.5	2.3	7.4	1.5	2.0	2.5	5.6
21	5.0	9.0	5.8	4.2	3.6	2.3	2.1	5.0	1.4	2.0	2.5	8.0
22	4.3	8.5	6.4	4.1	3.5	2.2	2.0	3.7	1.4	1.9	3.6	10.0
23	4.0	9.0	8.0	4.1	3.3	2.3	2.0	3.1	1.3	1.9	3.7	11.7
24	4.0	9.3	7.2	4.3	4.6	2.5	2.0	3.0	1.3	1.8	3.8	13.7
25	3.9	9.5	6.6	4.0	6.0	3.4	2.0	3.0	1.2	1.8	3.0	13.9
26	3.7	8.0	6.0	3.7	6.2	2.9	2.1	3.7	1.1	1.8	2.4	13.0
27	3.6	7.2	5.7	3.8	5.2	2.4	2.3	4.3	1.0	2.4	2.5	11.8
28	3.3	6.5	5.2	3.9	5.0	2.4	2.2	3.5	1.2	3.7	2.4	9.4
29	3.2	.....	4.9	3.8	4.2	2.5	2.0	3.2	1.2	3.4	2.4	7.9
30	3.2	.....	4.7	3.7	3.6	2.9	1.9	2.8	1.4	3.0	2.4	6.8
31	3.2	.....	4.5	.....	3.7	.....	1.8	2.5	.....	2.2	.....	6.6
1906												
1	6.5	8.5	4.9	11.8	3.4	2.8	3.0	5.4	3.8	4.5	2.9	3.7
2	6.3	7.6	4.9	10.0	3.4	2.8	3.0	5.6	6.6	4.4	2.9	3.6
3	6.2	7.0	5.1	8.1	3.4	2.7	3.6	5.5	5.4	7.2	2.8	3.6
4	7.4	6.7	5.7	7.0	3.5	2.7	3.5	5.3	5.3	10.0	2.8	3.6
5	10.4	6.3	5.6	6.9	4.0	2.7	3.4	5.0	5.5	11.9	2.8	3.5
6	12.4	6.1	5.5	6.8	4.4	2.9	4.0	4.6	5.1	12.4	2.8	3.5
7	13.0	5.9	5.4	6.6	5.2	3.2	3.8	4.4	5.6	12.0	2.8	3.6
8	13.4	6.0	5.6	6.4	6.0	3.0	3.4	4.1	10.3	10.2	2.7	3.9
9	12.0	6.5	6.7	6.2	6.4	2.9	3.2	3.9	11.4	9.0	2.7	4.0
10	11.4	7.5	8.5	6.4	6.2	2.6	6.3	6.5	11.7	8.0	2.7	4.0
11	10.6	8.0	8.0	6.6	5.6	2.5	6.9	6.0	9.0	6.5	2.9	4.0
12	8.0	7.7	7.6	6.7	4.8	2.5	5.5	6.0	7.0	5.8	3.1	3.8
13	7.0	7.0	7.0	6.6	4.2	3.0	5.0	5.5	6.0	5.0	3.3	3.7
14	6.9	6.5	7.4	6.3	3.8	3.8	8.4	6.0	5.5	4.6	3.5	3.7
15	7.2	6.4	6.6	6.4	3.5	3.8	8.6	5.8	7.5	4.4	3.8	3.7
16	7.0	6.2	6.0	6.6	3.2	10.6	7.6	7.0	5.7	4.2	4.6	3.8
17	6.9	6.0	6.0	6.4	3.1	11.9	6.4	7.8	5.0	4.0	5.0	3.9
18	6.8	5.7	9.0	6.0	3.0	12.6	6.0	7.0	4.8	3.7	5.5	4.2
19	6.8	5.7	9.6	5.8	2.8	13.0	5.9	6.7	4.7	3.6	5.8	4.2
20	6.4	5.7	10.5	5.0	2.7	12.1	6.7	6.0	4.4	7.3	5.6	4.8
21	6.0	5.7	10.8	4.5	2.7	10.0	7.0	5.0	4.0	7.8	6.0	6.2
22	6.1	5.7	12.0	4.2	2.6	8.0	7.2	4.4	5.8	9.7	6.6	7.0
23	11.4	6.6	13.7	4.0	2.5	7.0	6.4	6.0	5.4	7.7	6.0	7.6
24	12.2	6.0	14.4	3.8	2.7	6.1	6.0	6.9	4.6	5.0	5.5	6.5
25	14.2	5.7	13.8	3.6	3.0	5.6	9.3	7.5	4.0	4.0	5.2	5.2
26	15.0	5.4	12.1	3.5	3.1	5.0	10.0	7.2	4.0	3.5	4.6	4.8
27	14.3	5.2	9.0	3.5	3.4	4.4	9.6	6.5	4.0	3.3	4.0	4.6
28	12.0	5.0	7.8	3.5	3.4	3.6	8.4	6.0	4.4	3.2	3.8	4.5
29	11.6	.....	6.8	3.5	3.2	3.4	7.0	5.6	5.0	3.1	3.7	4.6
30	9.8	.....	6.4	3.4	3.0	3.2	6.6	5.4	4.7	3.0	3.7	5.0
31	10.0	.....	8.0	.....	2.9	.....	6.0	8.0	.....	3.0	.....	5.2

Rating table for Flint River near Montezuma, for 1905-6.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.00	640	2.40	1,215	3.80	1,900	6.40	3,550
1.10	675	2.50	1,260	3.90	1,955	6.60	3,690
1.20	710	2.60	1,305	4.00	2,010	6.80	3,840
1.30	750	2.70	1,350	4.20	2,120	7.00	3,990
1.40	790	2.80	1,400	4.40	2,240	8.00	4,750
1.50	830	2.90	1,450	4.60	2,360	9.00	5,570
1.60	870	3.00	1,500	4.80	2,480	10.00	6,420
1.70	910	3.10	1,550	5.00	2,600	11.00	7,300
1.80	950	3.20	1,600	5.20	2,725	12.00	8,200
1.90	990	3.30	1,650	5.40	2,855	13.00	9,160
2.00	1,035	3.40	1,700	5.60	2,990	14.00	10,200
2.10	1,080	3.50	1,750	5.80	3,130	15.00	11,270
2.20	1,125	3.60	1,800	6.00	3,270	16.00	12,400
2.30	1,170	3.70	1,850	6.20	3,410	17.00	13,580

NOTE.—The above table is based on discharge measurements made during 1901-1906, and is well defined between gage heights 1.8 feet and 6 feet.

Monthly discharge of Flint River near Montezuma, for 1905-6.

[Drainage area 2,700 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1905					
January	4,440	1,600	2,230	0.826	0.95
February	13,900	1,600	5,930	2.20	2.29
March	5,230	2,300	3,200	1.19	1.37
April	5,150	1,850	2,480	.918	1.02
May	3,690	1,600	2,470	.915	1.05
June	2,010	1,040	1,350	.500	.56
July	4,360	950	1,770	.656	.76
August	4,910	750	2,250	.833	.96
September	2,360	640	1,140	.422	.47
October	2,060	950	1,280	.474	.55
November	2,420	990	1,430	.530	.59
December	10,100	1,170	4,910	1.82	2.10
The year	13,900	640	2,540	.940	12.67
1906					
January	11,300	3,270	6,170	2.29	2.64
February	5,150	2,600	3,540	1.31	1.36
March	10,600	2,540	4,970	1.84	2.12
April	8,020	1,700	3,280	1.21	1.35
May	3,550	1,260	1,900	.704	.81
June	9,160	1,260	3,270	1.21	1.35
July	6,420	1,500	3,420	1.27	1.46
August	4,750	2,060	3,310	1.23	1.42
September	7,930	2,010	3,430	1.27	1.42
October	8,580	1,500	3,620	1.34	1.54
November	3,690	1,350	2,070	.767	.86
December	4,410	1,750	2,310	.856	.99
The year	11,300	1,260	3,440	1.27	17.32

NOTE.—Values for 1905 and 1906 are excellent.

FLINT RIVER AT ALBANY.

This station was originally established by the United States Weather Bureau April 10, 1893, and has been maintained from that date to the present. Discharge measurements by the Geological Survey were begun at this station in 1901, and the gage-height records furnished by the Weather Bureau have been used, except for a portion of the year 1903. The present observer, D. W. Brosnan, is paid by the Weather Bureau.

The channel above the station is straight for about 1,000 feet and is rough. Below the station the channel is straight for 700 feet. The river overflows both banks, but only under the approaches to the bridge. The bed is constant, but rough, and the current is irregular.

Discharge measurements are made from the Atlantic Coast Line two-span railroad bridge, which is 325 feet long, with 475 feet of trestle approach on the right bank and 240 feet on the left bank. The initial point for soundings is the center of the tubular iron pier on the upstream side of the bridge on the left bank.

The gage was washed out and replaced in 1898. It was again injured in 1902, and was replaced by a new gage June 17, 1902. The new gage was set 0.75 foot lower than the old gage as it existed prior to June 17, 1902. The gage heights were corrected from January 1 to June 17, 1902, inclusive, to correspond with the new gage. The Weather Bureau gage is attached to the Dougherty County Bridge, located about 700 feet below the Atlantic Coast Line bridge. It is in three sections. No. 1 is attached to the crib around the middle piers and extends to 4 feet above zero; No. 2 is spiked to a green cypress tree just above the bridge on the west bank of the river, and reads from 2 to 17 feet; No. 3 is spiked to a cedar post 16 feet high. This section begins at 17 feet and reads to 32 feet, which is 2½ feet above any high water known since 1840.

A standard chain gage belonging to the United States Geological Survey was installed April 20, 1904. It is fastened to the hand railing of the downstream footway of the Dougherty County Bridge near the middle of the west span. The gage was accurately set to correspond with the bench marks previously established, and its readings agree with the standard portion of the Weather Bureau

gage. The bottom of the box is 45.34 feet above the zero of the gage, and the length of the chain is 47.34 feet.

Bench marks were established as follows: (1) A copper plug set in the downstream corner of the brick abutment on the right bank under the Dougherty County Bridge; elevation, 33.81 feet. (2) The top of the first crossbeam from the right bank, upstream end of the railroad bridge; elevation, 43.20 feet.

Discharge measurements of Flint River at Albany.

Date	Gage height	Discharge	Date	Gage height	Discharge
1901	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft.*
March 9	4.75	5,364	April 19	2.78	4,474
March 26	8.05	10,680	June 18	.25	2,111
April 18	8.70	10,720	September 22	.20	2,044
July 19	2.63	4,256	September 23	.20	2,104
1902			November 15	1.11	3,630
June 25	1.90	3,886	November 16	1.20	3,056
June 25	1.90	3,440	November 21	.63	2,422
September 26	1.20	2,492	November 21	.61	2,378
December 4	6.11	8,006	1905		
1903			April 26	4.38	6,298
March 6	13.68	18,620	August 25	1.42	3,073
May 21	16.80	23,120	August 28	1.82	3,634
July 3	5.65	7,744	October 14	.79	2,640
September 18	13.06	16,640	1906		
October 14	1.20	3,484	February 12	9.62	13,800
December 22	3.25	5,035	February 13	9.06	12,900
			April 14	4.90	6,910
			June 14	3.64	5,560
			August 13	3.35	4,720
			November 28	2.33	3,930

Daily gage height, in feet, of Flint River at Albany.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1902												
1	6.8	3.8	9.6	8.9	4.8	4.8	2.6	3.0	2.3	2.2	1.8	2.2
2	6.1	5.0	11.8	9.3	4.8	3.6	2.3	3.0	2.0	2.0	1.7	3.6
3	6.7	6.8	15.0	9.8	4.9	2.8	2.0	2.8	1.8	1.8	1.6	4.2
4	6.9	9.0	19.6	9.8	5.1	2.6	2.0	2.4	1.6	1.7	1.7	6.1
5	6.8	11.9	20.9	10.5	5.0	2.5	2.2	2.4	1.6	1.7	1.5	7.3
6	6.6	12.6	22.7	10.8	5.1	2.5	2.1	2.5	1.4	1.8	1.1	7.9
7	7.5	13.3	22.9	9.9	4.8	2.6	1.8	2.8	1.6	1.7	.6	8.2
8	8.3	14.5	19.7	8.8	4.6	2.9	1.7	3.1	1.4	1.3	.4	8.9
9	9.1	14.8	17.6	8.7	3.9	4.1	1.7	3.1	1.3	1.4	.2	9.4
10	9.9	15.9	15.1	7.9	3.7	4.1	1.6	2.9	2.5	1.2	.1	9.9
11	10.8	16.1	11.2	7.8	3.8	4.3	1.4	2.7	3.2	1.0	.4	10.4
12	12.1	14.0	10.4	7.5	3.6	4.5	1.1	2.7	3.2	.9	.6	9.7
13	13.3	11.9	9.8	7.2	3.5	4.5	1.3	2.5	3.4	.8	.9	8.2
14	13.8	10.4	9.5	7.2	3.1	4.9	1.5	2.9	3.4	.7	.9	7.6
15	14.5	7.8	8.9	7.0	2.6	4.8	2.2	3.8	3.6	.7	1.1	6.4
16	14.8	6.9	11.5	7.5	2.5	4.5	2.1	3.6	3.9	.7	.8	6.0
17	12.1	6.6	16.3	7.6	2.6	4.9	2.0	3.4	4.3	.6	.6	5.4
18	10.8	6.0	17.0	7.5	3.0	4.3	1.9	3.4	4.4	.7	.4	5.1
19	10.1	7.6	15.6	7.6	3.3	3.9	1.8	3.2	3.9	.5	.4	4.7
20	9.8	7.8	14.1	7.8	3.6	3.7	1.8	3.1	3.7	.4	.3	4.4
21	8.6	8.9	12.8	7.9	3.1	3.1	1.8	2.9	3.9	.9	.1	4.9
22	7.1	9.8	11.7	8.0	2.8	2.8	1.9	2.2	4.1	1.2	.2	5.5
23	6.5	10.3	11.4	8.1	2.5	2.6	2.2	2.1	4.0	1.3	.4	5.7
24	5.1	9.7	10.8	7.9	2.6	2.6	2.6	1.9	4.0	1.8	.4	5.8
25	4.6	8.8	10.7	7.8	3.1	1.9	2.9	1.9	3.2	1.9	.5	6.1
26	4.4	8.1	10.5	7.6	3.5	2.3	2.9	1.8	1.2	2.1	.6	6.3
27	4.3	7.8	9.9	6.8	3.6	2.2	3.2	2.0	2.6	2.0	.9	6.9
28	4.3	7.9	9.6	6.5	3.8	2.2	3.4	2.2	2.4	1.8	.9	7.1
29	4.3	.....	9.6	5.6	4.3	2.0	3.4	2.4	2.2	1.7	1.3	6.6
30	4.2	.....	8.7	4.8	4.6	2.0	3.4	2.4	2.0	1.6	1.8	5.7
31	3.9	.....	7.9	.....	4.6	.....	3.2	2.3	.....	1.9	.....	4.8
1903												
1	4.1	4.5	8.1	14.4	5.9	4.8	6.5	2.4	2.5	2.6	1.7	3.1
2	3.5	4.9	7.0	13.7	4.6	4.4	6.4	2.3	2.4	2.5	1.7	2.9
3	3.0	5.3	7.9	13.0	4.7	4.5	5.8	2.2	2.4	2.4	1.9	2.8
4	3.2	5.6	8.5	13.0	4.0	5.6	4.7	2.1	2.3	2.3	2.9	2.8
5	3.4	5.4	9.6	13.0	3.9	7.3	4.0	2.5	2.2	2.2	5.0	2.7
6	3.9	5.1	13.5	12.6	3.7	9.0	4.6	3.4	2.0	2.1	7.5	2.7
7	4.2	5.1	14.5	11.5	4.5	11.4	4.5	5.4	1.9	2.0	7.8	2.6
8	4.2	5.0	13.9	10.0	5.2	13.2	4.3	6.5	1.8	2.0	6.7	2.6
9	4.2	5.0	13.5	9.0	5.9	13.7	4.7	6.9	1.7	1.9	5.5	2.9
10	4.6	5.4	11.7	8.5	6.9	13.1	6.0	7.0	1.5	1.9	4.6	3.2
11	4.7	7.2	11.6	9.0	7.7	12.4	6.6	5.5	1.4	2.0	3.9	3.5
12	5.2	8.9	10.7	9.6	8.0	11.5	7.2	4.6	1.2	2.1	3.7	3.7
13	5.2	15.8	9.3	10.1	9.0	9.4	8.2	4.3	1.1	2.1	3.8	3.8
14	5.4	21.6	8.7	10.9	9.2	7.0	8.3	4.0	1.5	1.9	4.0	3.8
15	5.4	22.8	8.5	11.0	9.8	5.5	7.4	4.1	6.6	1.7	3.9	3.6
16	5.4	24.6	8.5	11.5	11.9	4.4	6.4	4.4	11.8	1.6	3.8	3.5
17	5.2	25.0	8.5	12.0	16.3	3.8	6.3	5.2	12.8	1.9	3.7	3.4
18	4.7	24.1	8.0	12.3	16.7	3.4	6.2	6.8	13.0	2.5	3.6	3.3
19	4.7	22.6	7.5	12.5	15.7	3.2	5.5	8.0	13.4	3.2	3.6	3.1
20	4.4	21.8	7.0	12.0	16.0	3.1	4.1	9.1	15.0	3.9	3.6	3.1
21	4.4	19.7	6.5	10.0	16.7	3.1	3.6	10.0	16.8	4.2	3.5	3.1
22	4.6	16.2	6.5	8.0	16.6	3.0	3.0	10.7	17.0	3.6	3.5	3.3
23	4.6	14.1	6.3	7.6	14.5	3.0	2.5	10.8	15.4	3.0	3.4	3.5
24	4.1	13.9	6.5	7.6	10.0	3.5	2.3	10.7	10.7	2.5	3.3	3.7
25	3.7	12.6	7.0	7.7	6.3	4.1	2.6	10.7	4.8	2.3	3.3	3.7
26	3.5	11.2	7.1	7.3	5.5	3.7	3.0	10.6	4.0	2.1	3.2	5.0
27	3.3	10.6	9.0	6.2	4.9	3.5	3.4	10.6	3.7	2.0	3.3	6.2
28	3.4	9.1	10.0	5.4	4.2	3.6	3.9	7.3	3.4	1.9	3.3	7.1
29	3.6	.....	11.3	5.3	4.4	4.7	3.6	3.3	3.2	1.8	3.3	7.3
30	4.1	.....	14.4	5.2	4.5	6.0	2.8	2.9	2.8	1.8	3.2	6.8
31	4.3	.....	14.8	.....	5.0	.....	2.6	2.6	.....	1.7	.....	6.1

Daily gage height, in feet, of Flint River at Albany—Continued.

Day	Jan.	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
1	5.2	6.3	8.2	4.2	2.0	0.9	0.5	1.1	5.3	-0.1	-0.3	0.5
2	4.4	5.9	7.3	3.9	2.0	1.5	1.5	1.6	3.1	—.1	—.3	.6
3	4.2	5.6	6.7	3.7	1.9	2.6	1.5	1.6	2.2	—.1	—.2	.7
4	4.2	5.2	6.4	3.6	1.9	2.7	1.1	2.9	1.8	—.2	.1	1.6
5	4.1	5.0	6.3	3.4	2.4	2.4	.8	5.5	1.6	—.3	.5	2.8
6	4.0	4.7	6.6	3.2	2.5	1.9	.6	5.9	1.5	—.3	.8	3.6
7	3.9	4.8	7.0	3.3	2.2	1.5	.5	5.6	1.7	—.3	.9	3.6
8	4.4	5.2	7.3	4.1	1.9	1.3	.5	6.4	2.3	—.3	.8	3.5
9	4.7	6.4	7.3	5.0	1.7	1.1	.4	7.2	2.3	—.2	.6	3.4
10	5.1	8.8	7.8	5.4	1.6	1.3	.4	7.8	1.9	—.2	.4	3.1
11	6.0	12.9	8.1	5.9	1.6	1.2	.4	8.3	1.5	—.2	.3	2.6
12	6.4	16.9	8.1	5.9	1.6	1.0	.7	9.4	1.1	—.3	.3	2.4
13	7.0	19.2	7.5	5.4	1.5	.8	.9	10.8	1.0	—.3	.4	2.0
14	7.0	18.7	6.8	4.7	1.3	.7	1.1	12.2	.7	—.3	.7	1.8
15	6.8	17.2	6.4	3.8	1.3	.6	1.4	13.1	.6	—.3	1.1	1.6
16	6.4	15.8	6.2	3.4	1.3	.5	1.0	13.2	.6	—.3	1.2	1.5
17	6.0	14.8	6.2	3.2	1.4	.4	.7	12.1	.5	—.3	1.1	1.4
18	5.9	13.3	6.1	3.0	1.5	.3	.5	8.0	.4	—.4	.9	1.4
19	5.8	10.5	5.8	2.7	1.9	.2	.4	4.9	.4	—.4	.8	1.5
20	6.0	8.5	5.2	2.5	1.9	.2	.2	4.7	.3	—.4	.7	1.6
21	6.0	8.4	5.0	2.4	1.7	.2	.2	2.9	.2	—.4	.7	1.6
22	5.8	9.3	4.8	2.4	1.4	.1	.2	2.5	.2	—.4	.6	1.4
23	6.8	10.5	4.5	2.4	1.1	.3	.4	2.1	.2	—.4	.7	1.3
24	8.1	10.9	4.2	2.3	1.0	.5	.9	2.0	.2	—.4	.9	1.2
25	9.5	10.9	4.2	2.3	.8	.5	1.4	2.0	.1	—.4	1.1	1.2
26	9.7	10.6	4.1	2.2	.8	.4	1.2	2.2	.1	—.5	1.1	1.2
27	10.0	10.4	4.5	2.2	.7	.4	1.0	2.8	.1	—.5	1.0	1.2
28	10.4	10.1	5.0	2.1	.6	.3	1.2	4.0	.0	—.5	.9	1.6
29	10.3	9.4	4.9	2.0	.5	.3	1.0	4.1	.0	—.4	.7	2.3
30	9.0	.....	4.8	2.0	.6	.3	.7	6.0	.0	—.4	.6	3.2
31	7.0	.....	4.3	.....	.9	.....	1.0	6.4	.....	—.3	.....	4.1
1905												
1	4.2	2.2	8.0	5.0	4.6	2.8	1.9	.5	.8	.0	1.2	.8
2	3.8	2.4	7.2	4.7	4.2	3.1	2.4	.4	.8	1.0	.8	.7
3	3.1	2.3	6.7	4.5	4.9	3.2	3.0	.4	1.1	1.8	.7	1.1
4	2.6	2.3	6.3	4.2	5.9	2.7	4.0	.4	1.6	2.5	.6	1.3
5	2.2	2.2	5.9	4.1	6.4	2.2	4.4	.5	2.5	2.2	.6	2.2
6	2.0	2.2	5.7	4.1	6.7	2.0	4.4	.4	2.0	2.0	.4	3.6
7	2.3	2.6	5.5	4.0	6.6	2.0	4.0	.2	1.6	1.8	.6	4.5
8	2.7	3.2	5.2	4.2	6.1	2.0	2.9	.1	1.5	1.6	.5	5.1
9	2.7	5.2	5.1	5.0	5.5	1.7	2.2	.2	1.1	1.6	.3	6.0
10	2.5	6.7	5.8	5.4	5.4	1.4	1.6	.5	.7	1.3	.4	6.6
11	2.3	8.3	6.0	5.6	4.8	1.2	1.5	1.2	.5	1.7	.8	7.0
12	2.1	10.9	7.8	6.0	4.0	1.1	1.6	3.1	.3	.9	1.2	6.9
13	2.6	15.5	9.6	7.9	3.6	1.0	1.7	4.2	.5	.8	1.9	6.5
14	3.4	18.4	10.7	9.4	3.1	1.0	1.5	5.9	.3	.8	3.1	6.0
15	4.6	21.4	10.3	10.6	2.7	1.4	1.3	5.6	.2	.3	2.4	6.4
16	6.0	25.2	10.1	9.8	2.5	1.6	1.3	5.8	.1	.8	2.7	6.3
17	6.4	25.3	9.3	9.1	2.7	1.6	2.0	5.8	.4	.9	1.7	5.7
18	6.1	24.5	8.1	7.6	3.7	1.9	1.8	5.2	.4	.9	1.6	5.55
19	5.6	23.8	7.0	6.3	4.8	2.0	1.4	4.6	.2	.5	1.2	5.3
20	4.8	22.7	6.3	5.4	5.0	2.4	1.2	4.5	.1	.7	1.2	6.3
21	4.0	21.2	8.0	4.8	4.3	1.8	1.0	4.6	.0	.5	1.0	6.0
22	3.6	19.1	9.3	4.7	3.5	2.0	.9	3.8	.0	.4	.8	6.8
23	3.4	17.0	10.1	4.9	2.8	1.6	.7	2.4	—.1	.4	.6	9.2
24	3.3	14.0	9.7	4.9	4.3	1.9	.7	1.7	—.1	.3	.6	10.9
25	3.3	12.0	9.5	4.7	4.5	2.4	.8	1.4	—.2	.0	.8	11.8
26	3.1	11.1	9.1	4.4	5.1	2.5	.8	1.3	—.2	.5	.7	12.6
27	2.9	10.1	8.2	4.4	5.8	2.2	.7	1.6	—.3	.4	.8	13.4
28	2.8	9.0	7.2	4.4	5.4	1.5	.5	1.7	—.4	.6	1.0	13.6
29	2.5	.....	6.4	4.6	4.4	1.4	.8	1.7	—.2	1.3	1.0	13.3
30	2.3	.....	5.8	4.7	3.7	1.8	.8	1.3	—.3	1.3	.9	11.9
31	2.2	.....	5.4	.....	3.0	.....	.7	1.1	.....	1.4	.....	9.8

Daily gage height, in feet, of Flint River at Albany—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
1	7.9	14.1	4.6	7.9	1.8	2.7	2.0	5.8	5.1	2.8	2.2	1.9
2	7.3	11.6	4.3	9.1	1.8	2.4	1.9	5.4	5.9	2.7	2.0	1.8
3	6.9	9.0	5.1	10.4	1.7	1.9	2.1	5.0	6.1	2.7	2.0	1.8
4	7.9	7.5	6.4	10.2	1.7	1.8	2.5	4.9	5.0	3.7	1.9	1.7
5	8.6	6.5	7.2	8.8	3.1	1.7	2.5	4.6	4.2	5.8	1.8	1.7
6	10.2	6.1	8.0	7.1	4.2	1.6	2.8	3.8	4.0	6.9	1.8	1.7
7	10.5	5.8	7.9	6.0	5.1	1.9	2.8	3.2	4.0	8.5	1.8	1.8
8	11.1	6.2	7.7	5.3	6.4	2.1	2.7	4.2	5.3	9.3	1.8	1.9
9	12.0	6.8	7.7	4.9	7.2	1.8	2.8	5.1	7.6	9.7	1.8	2.0
10	12.7	7.3	7.9	4.6	7.1	1.2	2.9	5.6	9.7	9.0	1.7	2.0
11	12.9	9.2	8.5	4.5	6.3	1.5	5.0	5.8	10.2	7.7	1.7	2.1
12	12.5	9.7	8.9	4.5	5.5	1.4	5.6	4.8	9.9	6.5	1.6	2.3
13	11.2	9.3	9.1	4.8	4.6	2.0	5.8	3.6	7.8	4.2	1.6	2.0
14	8.8	8.9	9.2	4.9	3.8	3.3	6.5	3.4	6.0	2.5	1.5	2.0
15	7.9	7.9	8.8	4.7	3.1	4.9	7.6	3.6	4.5	2.2	1.8	2.2
16	7.6	7.0	8.1	4.5	2.6	7.3	7.9	3.5	4.5	2.0	2.0	2.1
17	7.1	6.6	6.7	4.5	2.3	9.5	8.1	4.0	4.4	2.0	2.1	2.0
18	6.7	6.4	6.2	4.4	2.3	10.4	8.3	5.3	4.3	2.1	3.0	1.8
19	6.3	6.0	6.2	4.3	2.2	10.4	8.4	5.5	3.5	2.1	3.5	1.8
20	6.0	5.5	8.0	3.9	2.2	10.6	7.7	5.7	2.6	2.0	3.1	2.1
21	5.8	5.2	9.0	3.5	2.1	11.1	7.4	5.9	2.0	3.4	2.9	3.0
22	6.2	5.6	10.4	3.3	2.2	11.4	7.3	5.3	1.7	4.8	3.5	3.6
23	8.1	5.9	10.8	3.2	2.5	10.4	7.0	4.3	2.3	6.7	4.3	4.6
24	13.2	6.4	11.2	2.9	2.6	8.0	6.4	4.1	3.6	7.1	4.0	5.0
25	17.0	6.3	12.1	2.6	2.6	5.2	5.7	5.3	3.7	6.7	3.6	5.0
26	17.5	6.0	13.1	2.5	2.8	3.5	6.2	6.1	3.4	5.5	3.3	4.2
27	18.1	5.5	13.7	2.4	3.7	2.8	7.0	6.2	3.1	3.7	2.6	3.5
28	18.0	5.0	13.6	2.3	4.2	2.5	7.4	5.5	3.1	3.2	2.4	3.0
29	17.1	.....	12.2	2.1	4.5	2.4	7.8	5.3	3.0	2.8	2.2	2.8
30	16.8	.....	9.0	1.9	4.0	2.6	7.2	5.0	3.0	2.5	2.1	2.9
31	15.9	.....	8.0	.....	3.4	.....	6.2	4.6	.....	2.4	.....	3.5

Rating tables for Flint River at Albany.

JANUARY 1 TO DECEMBER 31, 1902.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.10	1,380	2.30	3,855	5.00	6,895	9.40	11,845
.20	1,495	2.40	3,970	5.20	7,120	9.60	12,070
.30	1,605	2.50	4,080	5.40	7,345	9.80	12,295
.40	1,720	2.60	4,195	5.60	7,590	10.00	12,520
.50	1,830	2.70	4,305	5.80	7,795	10.50	13,083
.60	1,945	2.80	4,420	6.00	8,020	11.00	13,645
.70	2,055	2.90	4,530	6.20	8,245	11.50	14,208
.80	2,170	3.00	4,645	6.40	8,470	12.00	14,770
.90	2,280	3.10	4,758	6.60	8,695	13.00	15,895
1.00	2,395	3.20	4,870	6.80	8,920	14.00	17,020
1.10	2,505	3.30	4,983	7.00	9,145	15.00	18,145
1.20	2,620	3.40	5,095	7.20	9,370	16.00	19,270
1.30	2,730	3.50	5,208	7.40	9,595	17.00	20,395
1.40	2,845	3.60	5,320	7.60	9,820	18.00	21,520
1.50	2,955	3.70	5,433	7.80	10,045	19.00	22,645
1.60	3,070	3.80	5,545	8.00	10,270	20.00	23,770
1.70	3,180	3.90	5,658	8.20	10,495	21.00	24,895
1.80	3,295	4.00	5,770	8.40	10,720	22.00	26,020
1.90	3,405	4.20	5,995	8.60	10,945	23.00	27,145
2.00	3,520	4.40	6,220	8.80	11,170		
2.10	3,630	4.60	6,445	9.00	11,395		
2.20	3,745	4.80	6,670	9.20	11,620		

[a] This rating table is based on a tangent throughout, the difference being 112.5 per tenth.

Rating tables for Flint River at Albany—Continued.

JANUARY 1 TO DECEMBER 31, 1903.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec-ft.*	*Feet*	*Sec-ft.*	*Feet*	*Sec-ft.*	*Feet*	*Sec-ft.*
1.10	2,610	2.60	4,300	4.50	6,595	12.00	15,970
1.20	2,720	2.70	4,415	5.00	7,220	12.50	16,650
1.30	2,830	2.80	4,530	5.50	7,845	13.00	17,350
1.40	2,940	2.90	4,645	6.00	8,470	14.00	18,850
1.50	3,050	3.00	4,760	6.50	9,095	15.00	20,400
1.60	3,160	3.10	4,875	7.00	9,720	16.00	21,960
1.70	3,270	3.20	4,995	7.50	10,345	17.00	23,500
1.80	3,380	3.30	5,115	8.00	10,970	18.00	25,050
1.90	3,495	3.40	5,235	8.50	11,595	19.00	26,600
2.00	3,610	3.50	5,355	9.00	12,220	20.00	28,150
2.10	3,725	3.60	5,475	9.50	12,845	21.00	29,700
2.20	3,840	3.70	5,595	10.00	13,470	22.00	31,250
2.30	3,955	3.80	5,720	10.50	14,095	23.00	32,800
2.40	4,070	3.90	5,845	11.00	14,720	24.00	34,350
2.50	4,185	4.00	5,970	11.50	15,345	25.00	35,900

a Above gage height 13.50 feet the curve becomes a tangent, with a difference of 155 per tenth.

JANUARY 1, 1904, TO DECEMBER 31, 1905.

−0.50	1,480	1.50	3,235	3.50	5,225	7.00	9,150
− .40	1,560	1.60	3,330	3.60	5,330	7.20	9,380
− .30	1,645	1.70	3,425	3.70	5,435	7.40	9,610
− .20	1,730	1.80	3,520	3.80	5,540	7.60	9,840
− .10	1,815	1.90	3,615	3.90	5,645	7.80	10,070
.00	1,900	2.00	3,710	4.00	5,750	8.00	10,300
.10	1,985	2.10	3,805	4.20	5,970	8.50	10,900
.20	2,070	2.20	3,910	4.40	6,190	9.00	11,500
.30	2,155	2.30	4,000	4.60	6,410	9.50	12,100
.40	2,240	2.40	4,100	4.80	6,630	10.00	12,700
.50	2,330	2.50	4,200	5.00	6,850	11.00	14,000
.60	2,420	2.60	4,300	5.20	7,080	12.00	15,350
.70	2,510	2.70	4,400	5.40	7,310	13.00	16,750
.80	2,600	2.80	4,500	5.60	7,540	14.00	18,300
.90	2,690	2.90	4,600	5.80	7,770	15.00	20,000
1.00	2,780	3.00	4,700	6.00	8,000	16.00	21,700
1.10	2,870	3.10	4,805	6.20	8,230	17.00	23,400
1.20	2,960	3.20	4,910	6.40	8,460	18.00	25,200
1.30	3,050	3.30	5,015	6.60	8,690	19.00	27,000
1.40	3,140	3.40	5,120	6.80	8,920	20.00	28,900

JANUARY 1 TO DECEMBER 31, 1906.

1.20	2,960	2.60	4,300	4.00	5,785	6.80	9,170
1.30	3,050	2.70	4,400	4.20	6,015	7.00	9,420
1.40	3,140	2.80	4,500	4.40	6,245	8.00	10,670
1.50	3,235	2.90	4,600	4.60	6,475	9.00	11,920
1.60	3,330	3.00	4,700	4.80	6,705	10.00	13,170
1.70	3,425	3.10	4,805	5.00	6,940	11.00	14,420
1.80	3,520	3.20	4,910	5.20	7,180	12.00	15,750
1.90	3,615	3.30	5,015	5.40	7,420	13.00	17,150
2.00	3,710	3.40	5,120	5.60	7,670	14.00	18,630
2.10	3,805	3.50	5,230	5.80	7,920	15.00	20,140
2.20	3,900	3.60	5,340	6.00	8,170	16.00	21,700
2.30	4,000	3.70	5,450	6.20	8,420	17.00	23,300
2.40	4,100	3.80	5,560	6.40	8,670	18.00	24,900
2.50	4,200	3.90	5,670	6.60	8,920		

NOTE.—The above table is based on eighteen discharge measurements made during 1904–1906 and earlier high-water measurements. It is well defined.

Estimated monthly discharge of Flint River at Albany.

[Drainage area, 5,000 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1902					
January	17,588	5,658	10,472	2.09	2.41
February	19,383	5,545	12,279	2.46	2.56
March	27,033	10,158	16,251	3.25	3.75
April	13,420	6,670	10,274	2.05	2.29
May	7,008	4,080	5,509	1.10	1.27
June	6,783	3,405	5,020	1.00	1.12
July	5,095	2,505	3,737	.75	.86
August	5,545	3,295	4,296	.86	.99
September	6,220	2,620	4,442	.89	.99
October	3,745	1,720	2,793	.56	.65
November	3,295	1,380	2,176	.44	.49
December	12,270	3,745	8,565	1.71	1.97
The year	27,033	1,380	7,151	1.43	19.35
1903					
January	7,720	4,760	6,305	1.26	1.45
February	35,900	6,595	17,694	3.54	3.69
March	20,090	8,845	13,001	2.60	3.00
April	19,470	7,470	13,510	2.70	3.01
May	23,085	5,595	11,769	2.35	2.71
June	18,385	4,760	8,869	1.77	1.97
July	11,345	3,955	7,076	1.42	1.64
August	14,470	3,725	8,529	1.71	1.97
September	23,509	2,610	8,709	1.74	1.94
October	6,220	3,160	3,976	.80	.92
November	10,720	3,270	5,837	1.17	1.31
December	10,095	4,300	5,789	1.16	1.34
The year	35,900	2,610	9,255	1.85	24.95
1904					
January	13,220	5,645	8,553	1.71	1.97
February	27,380	6,520	13,550	2.71	2.92
March	19,540	5,860	8,068	1.61	1.86
April	7,885	2,710	5,175	1.04	1.16
May	4,200	2,330	3,215	.643	.741
June	4,400	1,985	2,683	.537	.599
July	3,235	2,070	2,587	.517	.596
August	17,060	2,870	7,949	1.59	1.83
September	7,195	1,900	2,872	.574	.640
October	1,815	1,480	1,629	.326	.376
November	2,960	1,645	2,457	.491	.548
December	5,860	2,280	3,723	.745	.859
The year	27,380	1,480	5,205	1.04	14.10
1905					
January	8,480	3,710	5,156	1.03	1.19
February	38,970	3,900	17,540	3.51	3.66
March	13,610	6,965	9,862	1.97	2.27
April	13,480	5,750	7,622	1.52	1.70
May	8,805	4,200	6,348	1.27	1.46
June	4,210	2,780	3,636	.727	.811
July	6,190	2,380	3,532	.706	.814
August	7,885	1,985	4,140	.828	.955
September	4,200	1,560	2,348	.469	.523
October	4,200	1,900	2,794	.559	.644
November	4,805	2,155	2,864	.571	.637
December	17,680	2,510	9,232	1.85	2.13
The year	38,970	1,560	6,255	1.25	16.79

Estimated monthly discharge of Flint River at Albany—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1906					
January	25,100	7,920	14,600	2.92	3.37
February	18,800	6,940	9,760	1.95	2.03
March	18,200	6,130	11,600	2.32	2.68
April	13,700	3,620	6,900	1.38	1.54
May	9,670	3,420	5,370	1.07	1.23
June	14,900	2,960	6,840	1.37	1.53
July	11,200	3,620	7,720	1.54	1.78
August	8,420	4,910	6,790	1.36	1.57
September	13,400	3,420	6,800	1.36	1.52
October	12,800	3,710	6,660	1.33	1.53
November	6,130	3,240	4,110	.822	.92
December	6,940	3,420	4,310	.862	.99
The year	25,100	2,960	7,620	1.52	20.69

NOTE.—Values for 1906 are excellent.

BIG POTATO CREEK NEAR THOMASTON.

This station was established in 1904. It is located at the highway bridge about 5 miles southwest of Thomaston, 200 yards above Daniel's old gristmill.

The channel is curved for about 200 feet above and straight for 300 feet below the station. The current is fairly swift, except at very low stages. Both banks are subject to occasional overflow. The bed of the stream is composed of rock and gravel, free from vegetation, and probably constant. There is but one channel at all stages, broken during the higher water by the piers of the bridge. Discharge measurements are made from the downstream side of the single-span iron bridge, which has trestle approaches of about 100 feet at each end. The initial point for soundings is the left end of the bridge on the downstream side.

Gage heights are determined directly from the bench marks, which are as follows: (1) The top of the downstream end of the first floor beam from the left bank; elevation, 23.00 feet. (2) A chisel mark on the intermediate post at the downstream end of the second-floor beam; elevation, 28.00 feet. Elevations refer to the datum of the assumed gage.

Discharge measurements of Big Potato Creek near Thomaston.[a]

Date	Gage height	Discharge	Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft.*
March 31	2.32	164	October 5	1.70	50
May 24	1.75	60			
July 6	1.80	61	1905		
September 23	1.74	49	September 21[b]	1.60	31
September 23	1.72	47	September 21[c]	1.53	20
October 5	1.69	43			

[a] There is a mill some distance above this point, which affects the flow more than was at first thought, making the discharge measurements of little or no value.

[b] 700 feet below bridge.

[c] Measured at Daniel's mill bridge.

MUCKALEE CREEK NEAR LEESBURG.

This station was established in 1905 in connection with the regular station on Kinchafoonee Creek. It is located about 3 miles east of Leesburg, at a wooden highway bridge consisting of two truss spans, with trestle approaches of about 50 feet on each side.

The current is slow at low water. The right bank will overflow at moderately high water for a long distance. Gage heights are determined directly from the bench mark, which is the top of the upstream end of the wooden cap of the middle bent of the bridge; elevation, 17.00 feet above the datum of the assumed gage.

Discharge measurements of Muckalee Creek near Leesburg.

Date	Gage height	Discharge
1905	*Feet*	*Sec.-ft.*
August 30	2.02	192
October 13	2.75	228
1906		
June 15	7.02	1,160

MUCKALEE CREEK NEAR ALBANY.

This station was established March 9, 1903, as a temporary station, by F. A. Murray, and was discontinued December 31, 1903. It was located at a wagon bridge 3 miles north of Albany, and a short distance below the mouth of Kinchafoonee Creek.

The channel was straight for 300 feet above the station and for 200 feet below, and the current was regular and of moderate velocity. Both banks were high and did not overflow. The bed was rocky

lower chord. The bottom of the box is 24.09 feet above the zero of the gage, and the length of the chain is 26.09 feet. The gage is read by H. B. Johnson. The bench mark is a cross on a bowlder embedded in the earth opposite the left end of the bridge approach and 25 feet upstream; elevation, 23.09 feet above gage datum.

Discharge measurements of Kinchafoonee Creek near Leesburg, in 1905-1907.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1905		*Feet*	*Sq. ft.*	*Feet*	*Sec.-ft.*
August 30	F. A. Murray	90	180	0.98	216
October 13	W. E. Hall	90	238	1.70	323
1906					
February 14	W. E. Hall	130	759	6.67	1,490
April 13	do.	115	438	3.87	736
June 15	F. A. Murray	152	888	6.94	1,750
November 29	W. E. Hall	105	333	2.44	463
1907					
January 19	M. R. Hall	107	342	2.72	503

Daily gage height, in feet, of Kinchafoonee Creek near Leesburg.

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Day	Aug.	Sept.	Oct.	Nov.	Dec.
1905						1905					
1	.....	1.0	1.8	1.45	1.7	17	.....	1.1	1.4	1.8	.....
2	.....	1.0	3.0	1.35	.....	18	.....	1.0	1.35	1.6	.....
3	.....	1.1	2.9	1.3	.....	19	.....	1.0	1.3	1.55	.....
4	.....	1.3	2.6	1.25	.....	20	.....	.9	1.25	1.5	.....
5	.....	1.5	2.4	1.2	.....	21	.....	.8	1.2	1.4	.....
6	.....	1.3	2.0	1.2	.....	22	.....	.8	1.2	1.4	.....
7	.....	1.2	1.9	1.2	.....	23	.....	.7	1.2	1.4	.....
8	.....	1.1	1.8	1.2	.....	24	.....	.7	1.2	1.4	.....
9	.....	1.0	1.7	1.2	.....	25	.....	.7	1.2	1.4	.....
10	.....	1.0	1.6	1.3	.....	26	.....	.6	1.2	1.5	.....
11	.....	.9	1.6	1.9	.....	27	.....	.6	1.3	1.6	.....
12	.....	.8	1.7	1.3	.....	28	.....	.6	1.5	1.7	.....
13	.....	.7	1.8	2.8	.....	29	.....	.8	1.55	1.8	.....
14	.....	.8	1.9	2.5	.....	30	1.0	1.0	1.5	1.7	.....
15	.....	.9	1.7	2.3	.....	31	1.0	.....	1.5	.....	.....
16	.....	1.0	1.6	2.0	.....						

Daily gage height, in feet, of Kinchafoonee Creek near Leesburg—Continued.

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906									
1	.....	2.0	2.3	2.5	3.8	3.5	2.8	2.5	2.4
2	.....	2.0	2.1	2.4	3.6	3.3	3.4	2.5	2.3
3	.....	1.9	1.9	2.5	3.5	3.1	4.1	2.5	2.3
4	.....	2.0	1.8	2.7	3.1	2.9	5.2	2.7	2.3
5	.....	3.6	2.0	2.9	2.7	2.8	5.0	2.9	2.3
6	.....	5.0	2.3	3.0	2.5	3.4	5.1	2.7	2.2
7	.....	5.5	2.5	2.9	2.7	5.6	5.2	2.5	2.3
8	.....	6.0	2.1	2.8	2.9	7.7	5.3	2.3	2.3
9	.....	6.5	1.4	3.0	3.3	10.5	4.9	2.3	2.3
10	.....	5.9	1.1	3.6	2.3	9.7	4.5	2.2	2.3
11	.....	4.8	1.0	4.5	2.0	7.1	3.9	2.2	2.3
12	3.8	4.6	2.3	5.9	2.1	4.4	3.0	2.2	2.4
13	3.8	3.7	4.1	7.1	2.2	3.8	2.3	2.1	2.5
14	3.8	2.9	5.6	8.2	2.3	3.1	2.1	2.0	2.5
15	3.7	2.7	7.2	6.8	2.5	2.9	2.0	2.5	2.5
16	3.8	2.5	11.5	5.1	2.6	2.7	1.9	2.9	2.4
17	3.9	2.3	10.0	5.2	2.6	2.5	1.8	3.1	2.4
18	3.8	2.2	8.6	5.8	2.5	2.3	1.9	3.3	2.5
19	3.4	2.5	7.8	5.3	2.2	2.2	2.6	3.4	3.0
20	2.9	2.4	7.2	4.9	1.9	2.1	3.5	3.5	3.6
21	2.7	2.3	7.1	4.7	1.7	2.0	4.7	3.5	4.2
22	2.6	2.2	7.3	4.9	1.7	1.8	6.3	3.3	4.8
23	2.5	2.1	5.5	5.1	2.8	1.9	7.8	3.1	5.0
24	2.5	2.2	4.6	4.3	3.1	2.0	6.5	2.8	4.5
25	2.3	2.7	3.7	3.9	3.5	1.8	4.9	2.7	3.9
26	2.2	3.4	3.3	3.6	3.4	1.6	3.4	2.6	3.2
27	2.1	3.9	2.9	3.1	3.3	1.8	2.9	2.5	2.9
28	2.1	4.5	2.8	3.0	3.4	2.0	2.8	2.5	2.7
29	2.1	4.3	2.7	3.6	3.5	2.1	2.7	2.4	2.8
30	2.0	3.6	2.6	4.5	3.7	2.3	2.7	2.4	3.0
31	.....	2.5	.....	4.1	3.6	.....	2.6	.....	3.3

Rating table for Kinchafoonee Creek near Leesburg, for 1905-6.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.60	164	2.00	380	3.40	638	5.60	1,189
.70	177	2.10	397	3.50	658	5.80	1,251
.80	191	2.20	414	3.60	679	6.00	1,315
.90	205	2.30	432	3.70	700	6.20	1,381
1.00	220	2.40	450	3.80	721	6.40	1,447
1.10	235	2.50	468	3.90	743	6.60	1,515
1.20	250	2.60	486	4.00	765	6.80	1,583
1.30	266	2.70	504	4.20	811	7.00	1,653
1.40	282	2.80	522	4.40	859	8.00	2,015
1.50	298	2.90	541	4.60	909	9.00	2,400
1.60	314	3.00	560	4.80	961	10.00	2,900
1.70	330	3.10	579	5.00	1,015	11.00	3,200
1.80	346	3.20	598	5.20	1,071		
1.90	363	3.30	618	5.40	1,129		

NOTE—The above table is based on seven discharge measurements made during 1905-1907 and is well defined below gage height 4 feet.

Monthly discharge of Kinchafoonee Creek near Leesburg.

Month	Discharge in second-feet		
	Maximum	Minimum	Mean
1905			
September	298	164	211
October	560	250	328
November	522	250	311
1906			
April 12-30	743	380	556
May	1,480	363	668
June	3,400	220	969
July	2,090	450	870
August	721	330	528
September	3,000	314	754
October	1,940	346	768
November	658	330	500
December	1,020	414	548

NOTE—Values for 1905 and 1906 are excellent.

KINCHAFOONEE CREEK NEAR ALBANY.

This station was established as a temporary station March 9, 1903, by F. A. Murray, and was discontinued December 31, 1903. It was located at the wagon bridge 3 miles north of Albany, Ga., 200 feet below the Central of Georgia Railroad bridge and about one-half mile above the mouth of the creek.

The channel is curved both above and below the station. Both banks are high and all water passes beneath the bridge and its approaches. The bed is probably somewhat shifting.

Discharge measurements were made from the single-span highway bridge and its approaches, which cross the river at an angle to the direction of the current.

During 1905 the station was deeply covered with water by a large water-power development just below.

Discharge measurements of Kinchafoonee Creek near Albany.

Date	Gage height	Discharge	Date	Gage height	Discharge
1901	*Feet*	*Sec.-ft.*	1903	*Feet*	*Sec.-ft.*
March 9	2.25	1,208	March 26	4.28	3,886
March 26	3.25	1,920	May 22	3.32	1,682
April 18	2.82	1,741	July 2	1.84	944
July 19	1.59	714	September 19	3.29	2,051
1902			October 15	.98	422
June 25	1.15	477	December 22	1.76	851
September 27	1.20	499	1904		
December 4	2.40	1,196	June 18	.62	258
			September 22	.65	296
			November 16	1.12	535

Gage heights for discharge measurements made during the years 1901 and 1902 were obtained by measuring down from the bench mark to surface of the water.

Daily gage height, in feet, of Kinchafoonee Creek near Albany.

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903										
1	.....	2.9	1.5	1.9	1.8	1.2	1.0	1.2	0.9	1.6
2	.....	2.9	1.5	1.6	1.8	1.3	1.0	1.1	1.1	1.6
3	.....	2.8	1.5	1.5	1.8	1.3	1.0	1.1	1.5	1.6
4	.....	2.8	1.5	1.8	1.9	1.2	1.0	1.1	2.0	1.6
5	.....	2.8	1.9	2.0	1.7	1.2	1.0	1.1	2.5	1.6
6	.....	2.7	2.6	2.6	1.6	1.2	.9	1.1	2.8	1.6
7	.....	2.6	2.6	2.9	1.7	1.3	.9	1.0	2.8	1.6
8	.....	2.5	2.7	3.2	1.9	1.5	.9	1.0	2.7	1.6
9	3.2	2.4	2.9	2.8	2.2	1.5	.9	1.0	2.5	1.6
10	3.0	2.4	2.7	2.4	2.6	1.5	.8	1.0	2.3	1.6
11	2.8	2.4	2.7	2.0	2.6	1.5	.8	1.0	2.2	1.6
12	2.6	2.4	2.9	1.9	2.6	1.5	.8	.9	2.1	1.6
13	2.4	2.5	3.1	1.7	2.6	1.6	.8	.9	2.1	1.6
14	2.2	2.6	3.6	1.7	2.7	1.7	1.6	.9	2.1	1.6
15	2.2	3.0	4.6	1.6	2.7	1.8	3.9	.8	2.0	1.6
16	2.2	3.4	8.6	1.5	2.5	1.8	4.3	.8	2.0	1.6
17	2.2	3.6	11.8	1.4	2.1	1.8	4.6	.8	2.0	1.6
18	2.2	3.5	9.3	1.3	1.7	2.4	4.2	.8	2.0	1.6
19	2.2	3.0	6.6	1.3	1.5	2.8	3.3	1.4	2.0	1.6
20	2.2	2.8	5.2	1.3	1.3	3.2	2.9	1.4	2.0	1.6
21	2.3	2.7	4.6	1.3	1.3	3.7	2.7	1.3	2.0	1.6
22	2.3	2.6	3.7	1.2	1.2	3.9	2.5	1.3	2.0	1.6
23	2.3	2.5	2.9	1.2	1.2	2.9	2.1	1.0	1.9	1.6
24	2.4	2.4	2.7	1.4	1.2	2.2	1.5	.9	1.9	1.6
25	2.4	2.2	2.6	1.5	1.2	1.9	1.4	.9	1.8	1.6
26	2.5	2.0	2.3	1.4	1.3	1.7	1.3	.9	1.8	1.6
27	2.5	1.8	2.0	1.5	1.4	1.5	1.3	.9	1.7	1.9
28	2.5	1.7	1.9	1.5	1.5	1.3	1.3	.9	1.6	2.4
29	2.6	1.7	2.0	1.6	1.3	1.1	1.2	.9	1.6	2.6
30	2.7	1.6	2.0	1.8	1.3	1.1	1.2	.9	1.6	2.6
31	2.8	.....	2.0	.....	1.3	1.0	.....	.9	.....	2.6

Rating table for Kinchafoonee Creek near Albany from March 9 to December 31, 1903.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.80	332	2.10	1,070	3.80	2,330	6.40	3,800
.90	381	2.20	1,135	4.00	2,490	6.60	3,900
1.00	432	2.30	1,200	4.20	2,630	6.80	4,000
1.10	485	2.40	1,265	4.40	2,760	7.00	4,100
1.20	539	2.50	1,330	4.60	2,880	7.50	4,350
1.30	594	2.60	1,400	4.80	3,000	8.00	4,600
1.40	650	2.70	1,470	5.00	3,100	8.50	4,850
1.50	707	2.80	1,540	5.20	3,200	9.00	5,100
1.60	765	2.90	1,615	5.40	3,300	9.50	5,350
1.70	824	3.00	1,690	5.60	3,400	10.00	5,600
1.80	884	3.20	1,850	5.80	3,500	11.00	6,100
1.90	945	3.40	2,010	6.00	3,600	12.00	6,600
2.00	1,007	3.60	2,170	6.20	3,700	.....	.....

Estimated monthly discharge of Kinchafoonee Creek near Albany.

Month	Discharge in second-feet		
	Maximum	Minimum	Mean
1908			
March 9-31	1,850	1,135	1,314
April	2,170	765	1,398
May	6,500	707	1,964
June	1,850	589	874
July	1,470	589	892
August	2,410	432	911
September	2,880	332	934
October	650	332	438
November	1,540	381	1,006
December	1,400	765	848

ICHAWAYNOCHAWAY CREEK AT MILFORD, GA.

This station is located at the wagon bridge at Milford, Ga. When first established, on August 29, 1905, the bridge was an old wooden structure, which was shortly afterwards replaced by a new steel bridge, with one span of 110 feet, with short trestle approaches at both ends. The temporary vertical gage was also replaced by a standard chain gage, attached to the downstream side of the new bridge; length of chain, 23.46 feet. The observer is W. J. Kidd.

The current is moderately swift and is broken by old bridge timbers still remaining in the channel. The station is about 100 feet above the remains of an old wooden dam, which retains the water at a higher level than it would otherwise have. Gage heights for 1905 and 1906 are from the chain gage described above, but future records will be from a gage located below the dam.

Discharge measurements of Ichawaynochaway Creek at Milford.

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1905		*Feet*	*Sq. ft.*	*Feet*	*Sec.-ft.*
August 29	F. A. Murray	111	458	2.89	364
October 16	W. E. Hall	116	452	3.05	396
1906					
February 15	W. E. Hall	137	666	4.65	1,390
April 18	do	123	574	3.78	715
April 18	do	123	574	3.76	698
June 13	F. A. Murray	144	718	4.80	1,770
August 14	W. E. Hall	120	555	3.45	726
November 26	do	125	493	3.46	592
1907					
January 22	M. R. Hall	120	496	3.56	690
January 22	do	120	499	3.57	705

Daily gage height, in feet, of Ichawaynochaway Creek at Milford.

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Day	Aug.	Sept.	Oct.	Nov.	Dec.
1905						1905					
1	.....	2.8	3.2	3.05	2.95	17	.....	2.8	3.05	3.55	4.05
2	.....	2.8	3.4	3.0	2.9	18	.....	2.75	3.2	3.5	4.0
3	.....	2.8	3.5	3.0	2.9	19	.....	2.7	3.2	3.4	4.0
4	.....	2.75	3.6	3.0	2.95	20	.....	2.65	3.1	3.3	4.15
5	.....	2.7	3.6	3.1	3.0	21	.....	2.6	3.1	3.25	4.7
6	.....	2.7	3.7	3.1	3.1	22	.....	2.6	3.0	3.2	5.0
7	.....	2.65	3.7	3.15	3.25	23	.....	2.55	3.1	3.15	5.5
8	.....	2.6	3.5	3.25	3.4	24	.....	2.55	3.2	3.1	6.0
9	.....	2.6	3.1	3.35	3.5	25	.....	2.5	3.35	3.05	5.9
10	.....	2.55	3.15	3.4	3.6	26	.....	2.5	3.5	3.0	5.4
11	.....	2.55	3.2	3.45	3.65	27	.....	2.5	3.45	3.0	4.9
12	.....	2.7	3.3	3.5	3.7	28	.....	2.45	3.3	3.0	4.9
13	.....	2.9	3.4	3.55	3.9	29	2.9	2.62	3.2	3.0	4.7
14	.....	3.0	3.4	3.6	4.0	30	2.85	2.92	3.15	3.0	4.5
15	.....	3.0	3.2	3.6	4.05	31	2.8	.....	3.05	.....	4.4
16	.....	2.9	3.0	3.6	4.05						

Daily gage height, in feet, of Ichawaynochaway Creek at Milford, for 1906.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
1	4.4	4.9	4.1	4.3	3.1	3.7	3.9	3.4	4.4	3.5	3.2	4.3
2	4.4	4.8	4.05	4.2	3.1	3.6	3.8	3.35	4.1	3.7	3.25	4.3
3	4.6	4.7	4.0	4.1	3.3	3.5	3.7	3.3	4.1	4.0	3.25	4.2
4	5.0	4.6	4.0	4.05	3.5	3.4	3.6	3.3	4.2	4.4	3.25	4.1
5	5.6	4.5	4.2	4.0	4.0	3.3	3.5	3.2	4.3	4.8	3.3	4.0
6	6.0	4.5	4.8	3.9	4.8	3.2	3.5	3.2	4.2	4.7	3.3	3.9
7	5.8	4.6	5.4	3.8	5.3	3.25	3.6	3.3	4.0	4.3	3.3	3.8
8	5.2	4.7	5.0	3.9	5.8	3.3	3.8	3.3	4.1	4.0	3.3	3.7
9	4.8	5.0	4.6	4.0	5.3	3.3	4.0	3.2	4.2	3.7	3.3	3.6
10	4.7	5.3	4.5	4.05	5.6	3.35	4.1	3.2	4.3	3.5	3.3	3.5
11	4.6	5.5	4.4	4.1	5.3	3.4	4.4	3.3	4.05	3.4	3.3	3.4
12	4.45	5.2	4.3	4.0	4.6	3.45	4.8	3.4	3.9	3.3	3.3	3.4
13	4.3	5.0	4.35	3.9	4.1	4.5	5.2	3.35	3.7	3.2	3.35	3.4
14	4.2	4.9	4.4	3.8	3.7	10.9	5.0	3.35	3.5	3.1	3.4	3.4
15	4.0	4.8	4.45	3.8	3.55	11.6	4.6	3.4	3.4	3.0	3.4	3.5
16	4.0	4.7	4.35	3.8	3.4	11.5	4.4	3.45	3.3	2.9	3.4	3.6
17	4.0	4.6	4.3	3.85	3.3	8.6	4.4	3.5	3.3	3.2	4.5	3.7
18	3.9	4.5	4.35	3.8	3.2	6.7	6.2	3.45	3.25	3.6	4.55	3.8
19	3.9	4.4	4.4	3.7	3.1	5.1	5.8	3.45	3.2	3.7	4.5	3.9
20	4.0	4.35	4.4	3.65	3.1	4.7	5.2	3.5	3.1	3.8	4.55	4.0
21	4.1	4.35	4.45	3.6	3.2	4.6	4.6	3.6	3.1	3.8	4.6	4.1
22	4.8	4.4	4.45	3.55	3.3	4.5	4.2	3.7	3.0	3.7	4.7	4.25
23	6.8	4.45	4.45	3.5	3.4	4.35	4.0	3.8	3.0	3.8	4.6	4.4
24	10.3	4.45	4.5	3.45	3.7	4.3	3.9	4.1	2.9	3.2	4.5	4.6
25	10.9	4.4	4.5	3.4	4.1	4.1	3.8	4.5	2.9	3.0	4.4	4.7
26	8.0	4.3	4.5	3.35	4.4	3.9	3.7	4.3	3.0	3.1	4.4	4.6
27	6.5	4.2	4.45	3.3	4.5	3.65	3.6	4.2	3.2	3.2	4.35	4.5
28	6.0	4.15	4.45	3.25	4.55	3.5	3.6	4.0	3.35	3.2	4.3	4.3
29	5.5	.....	4.4	3.2	4.6	3.4	3.55	3.85	3.5	3.3	4.3	4.2
30	5.3	.....	4.35	3.15	4.4	3.6	3.5	3.6	3.5	3.2	4.3	4.1
31	5.1	.....	4.3	.....	3.9	.....	3.4	3.9	.....	3.2	.....	4.1

Rating table for Ichawaynochaway Creek at Milford, for 1905-6.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.40	170	3.30	540	4.20	1,120	6.00	2,800
2.50	200	3.40	595	4.30	1,200	7.00	3,800
2.60	235	3.50	650	4.40	1,280	8.00	4,800
2.70	270	3.60	710	4.50	1,360	9.00	5,800
2.80	310	3.70	770	4.60	1,445	10.00	6,800
2.90	350	3.80	835	4.70	1,530	11.00	7,800
3.00	395	3.90	900	4.80	1,620		
3.10	440	4.00	970	4.90	1,710		
3.20	490	4.10	1,045	5.00	1,800		

NOTE.—The above table is based on ten discharge measurements made during 1905-1907 and is not well defined.

Monthly discharge of Ichawaynochaway Creek at Milford, for 1905-6.

Month	Discharge in second-feet		
	Maximum	Minimum	Mean
1905			
September	395	185	270
October	770	395	539
November	710	395	516
December	2,800	350	1,130
1906			
January	7,700	900	2,190
February	2,300	1,080	1,500
March	2,200	970	1,310
April	1,200	465	814
May	3,100	440	1,110
June	8,400	490	1,840
July	3,000	595	1,150
August	1,360	490	703
September	1,280	350	742
October	1,620	350	711
November	1,530	490	913
December	1,530	595	976
The year	8,400	350	1,160

NOTE.—Values for 1905 and 1906 good.

MISCELLANEOUS DISCHARGE MEASUREMENTS IN APALACHICOLA RIVER DRAINAGE BASIN

Beaverdam Creek.—This stream is a tributary of Soque River, entering from the right. A measurement was made May 13, 1904, from the bridge about 1 mile from Clarkesville, on the road to Nacoochee, Ga. The bench mark is the top of the brace from hand rail to large birch on the upper side of the bridge at the right bank, 12.00 feet above the datum of the gage.

Width, 22 feet; area, 12 square feet; mean velocity, 1.50 feet per second; gage height, 0.45 foot; discharge, 18 second-feet.

TOCCOA FALLS, HABERSHAM COUNTY, GEORGIA.

Big Potato Creek.—Before the section now adopted as a regular bench-mark station was found, two measurements of Big Potato Creek were made at the covered wagon bridge, 2½ miles from Thomaston, just below the Macon and Birmingham Railroad trestle. The bench mark is the top of the downstream lower stringer at sounding point 80. The elevation above gage zero is 15.00 feet.

January 15, 1904: Width, 82 feet; area, 188 square feet; mean velocity, 0.85 foot per second; gage height, 3.30 feet; discharge, 160 second-feet.

March 31, 1904: Width, 72 feet; area, 175 square feet; mean velocity, 0.74 foot per second; gage height, 3.25 feet; discharge, 130 second-feet.

Blue Spring.—This spring is of considerable local note. It is about one-half mile from the left bank of Flint River and about 4 miles below Albany, on the county road leading to Hardaway. Measurements were made from the foot log over the outlet of the main spring as follows:

April 19, 1904: Width, 25 feet; area, 45 square feet; mean velocity, 3.00 feet per second; gage height, 3.29 feet; discharge, 135 second-feet.

September 23, 1904: Width, 28 feet; area, 30 square feet; mean velocity, 1.47 feet per second; gage height, 2.85 feet; discharge, 44 second-feet.

November 16, 1904: Width, 22 feet; area, 21 square feet; mean velocity, 1.24 feet per second; gage height, 2.77 feet; discharge, 26.4 second-feet.

April 26, 1905: Width, 33 feet; area, 30 square feet; mean velocity, 2.30 feet per second; discharge, 69 second-feet.

Buck Creek.—This stream enters Flint River from the right about 1 mile west of Montezuma, Ga. A measurement was made August 23, 1905, at an old tramroad trestle about 1 mile above the mouth of the creek. The bench mark is the top of the upstream end of the cap of the first bent from the left edge of the stream; elevation, 12.00 feet above the datum of the assumed gage.

Width, 49 feet; area, 118 square feet; mean velocity, 1.42 feet per second; gage height, 2.20 feet; discharge, 167 second-feet.

Chattahoochee River.—A measurement was made September 25, 1905, from a boat held by cable stretched across the channels of the river about 8 miles upstream from Columbus and about 1½ miles above the mouth of Standingboy Creek. The bench mark is the top of a large wire nail which is driven into the base of an ash tree which stands about 25 feet below Narramore's spring branch; elevation, 5.00 feet above the datum of the assumed gage.

Width, 282 feet; area, 1,150 square feet; mean velocity, 0.98 foot per second; gage height, 1.75 feet; discharge, 1,125 second-feet.

Chickasawhachee Creek.—A measurement was made August 26, 1905, at McRainey Bridge, about 10 miles west of Newton, Ga. The initial point for soundings is the end of the bridge at the left bank, downstream side. The bench mark is the top of the downstream end of the middle bent of the bridge; elevation, 12.50 feet above the datum of the assumed gage.

Width, 35 feet; area, 38 square feet; mean velocity, 0.92 foot per second; gage height, 0.80 foot; discharge, 35 second-feet.

Coolawahee Creek.—A measurement was made August 28, 1905, from the downstream side of a wooden wagon bridge about 1 mile north of Newton, Ga. The bench mark is the top of the downstream end of the floor plank at a point 1 foot to the left of the center post; elevation, 11.50 feet above the datum of the assumed gage.

Width, 23 feet; area, 24 square feet; mean velocity, 1.62 feet per second; gage height, 0.70 foot; discharge, 25.5 second-feet.

Deep Creek.—This stream is a tributary of Soque River. A measurement was made May 13, 1904, from the wooden bridge on Burton road, about 3 miles from Clarkesville.

Width, 25 feet; area, 26 square feet; mean velocity, 1.58 feet per second; discharge, 41 second-feet.

Elkins Creek.—Measurements were made during 1905 at a wooden wagon bridge 1 mile north of Thunder, Ga., about 200 feet below a small gristmill. As the flow at low water depends on the operation of the mill, the measured discharges do not give the natural flow of the stream. The bench mark is a notch and copper nails on the upstream main brace of the truss of the bridge, 8½ feet from the left end of the truss; elevation, 24.00 feet above the datum of the assumed gage.

April 21, 1905: Width, 42 feet; area, 38 square feet; mean velocity, 1.79 feet per second; gage height, 2.07 feet; discharge, 68 second-feet.

September 27, 1905: Width, 28 feet; area, 10 square feet; mean velocity, 0.73 foot per second; gage height, 1.45 feet; discharge, 7.3 second-feet.

Flint River.—A measurement was made September 24, 1904, from the wooden bridge 5 miles from Concord. The bench mark is the top of the first post from the right bank on the downstream side of the bridge, 12.00 feet above the datum of the gage.

Width, 92 feet; area, 184 square feet; mean velocity, 0.43 foot per second; gage height, 2.05 feet; discharge, 79 second-feet.

A measurement was made September 21, 1904, at the highway bridge, about 1 mile northwest of Montezuma. The bench mark is the top of the upstream pier at the left bank, which was 26.15 feet above the water surface. The gage height given is that taken from the temporary gage belonging to the United States Weather Bureau.

Width, 188 feet; area, 1,300 square feet; mean velocity, 0.75 foot per second; gage height, 10.63 feet; discharge, 971 second-feet.

A measurement was made September 20, 1905, at Parkers Bridge, about 7 miles west of Thomaston, Ga. The bench mark is the top of the upstream end of the first floor beam from the middle pier in the first iron span from the right bank; elevation, 35.00 feet above the datum of the assumed gage.

Width, 136 feet; area, 158 square feet; mean velocity, 1.39 feet per second; gage height, 5.00 feet; discharge, 219 second-feet.

Measurements were made at Powells Bridge, 3 miles above the regular gaging station at Woodbury. The bench mark is the top of the right upstream post of first pier from the right bank, 15.00 feet above the datum of the gage.

January 16, 1904: Width, 139 feet; area, 527 square feet; mean velocity, 1.39 feet per second; gage height, 5.88 feet; discharge, 730 second-feet.

September 22, 1904: Width, 116 feet; area, 332 square feet; mean velocity, 0.43 foot per second; gage height, 4.54 feet; discharge, 144 second-feet.

October 4, 1904: Width, 115 feet; area, 314 square feet; mean velocity, 0.34 foot per second; gage height, 4.40 feet; discharge, 107 second-feet.

April 21, 1905: Width, 143 feet; area, 479 square feet; mean velocity, 1.05 feet per second; gage height, 5.47 feet; discharge, 502 second-feet.

Hazel Creek.—This stream is a tributary of Soque River, entering from the left. Measurements were made from the bridge 1 mile from Demorest, on the road to Porter Mills. The bench mark is the top of the upper end of second floor beam from the right bank, 15.00 feet above the datum of the assumed gage.

May 13, 1904: Width, 25 feet; area, 30 square feet; mean velocity, 1.47 feet per second; gage height, 1.85 feet; discharge, 44 second-feet.

September 5, 1905: Width, 27 feet; area, 24 square feet; mean velocity, 1.37 feet per second; gage height, 0.82 foot; discharge, 33 second-feet.

October 23, 1905: Width, 27 feet; area, 20 square feet; mean velocity, 1.15 feet per second; gage height, 0.71 foot; discharge, 23 second-feet.

Ichawaynochaway Creek.—A measurement was made August 26, 1905, from the downstream side of Barnetts Bridge, 10 miles southwest of Newton, Ga. The initial point for soundings is the left end of the bridge approach, downstream side. The bench mark is the top of the downstream end of the second iron crossbeam from the left-bank pier; elevation, 29.50 feet above the datum of the assumed gage.

Width, 84 feet; area, 196 square feet; mean velocity, 2.62 feet per second; gage height, 1.30 feet; discharge, 513 second-feet.

A measurement was made August 26, 1905, from the downstream side of Rentz Bridge, about 12 miles west of Newton, Ga. The initial point for soundings is the end of the downstream hand rail at the left bank. The bench mark is the top of the downstream end of the cap of the bent which stands in the middle of the creek; elevation, 14.50 feet above the datum of the assumed gage.

Width, 76 feet; area, 355 square feet; mean velocity, 1.31 feet per second; gage height, 2.20 feet; discharge, 465 second-feet.

A measurement was made April 27, 1905, at the Central of Georgia Railway bridge, 1¼ miles from Williamsburg, Ga. The bench mark is the top of the downstream end of the third bent from the left bank; elevation, 20.00 feet above the datum of the assumed gage.

Width, 92 feet; area, 727 square feet; mean velocity, 1.06 feet per second; gage height, 7.66 feet; discharge, 767 second-feet.

Nickajack Creek.—This stream enters Chattahoochee River from the right, about 1 mile below the old gaging station at Oakdale. Measurements were made by wading about 100 feet above the Southern Railway bridge near Nickajack. The bench mark is the top of the second upstream iron girder from the left end of the bridge, 12 feet from the end, which rests on the center pier, 15.00 feet above the datum of the gage.

October 8, 1904: Width, 16 feet; area 10 square feet; mean velocity, 1.00 foot per second; gage height, 0.92 foot; discharge, 10 second-feet.

October 8, 1904: Width, 16 feet; area, 11 square feet; mean velocity, 1.19 feet per second; gage height, 0.94 foot; discharge, 12.6 second-feet.

North Fork of Peachtree Creek.—A measurement was made May 20, 1904, from the Cheshire Bridge, 1½ miles above the Southern Railway bridge at Armour. The bench mark is the top of a bent

nail in the bottom of the twelfth rail post from the right end of the bridge, 16.00 feet above the datum of the gage.

Width, 11 feet; area, 14 square feet; mean velocity, 1.71 feet per second; gage height, 0.90 foot; discharge, 24 second-feet.

Peachtree Creek.—This stream is a tributary of Chattahoochee River. A measurement was made May 20, 1904, from the Southern Railway bridge at Armour. The bench mark is the top of the middle stringer at its center on the downstream side of the bridge, 15.00 feet above the datum of the gage.

Width, 27 feet; area, 27 square feet; mean velocity, 1.22 feet per second; gage height, 0.17 foot; discharge, 33 second-feet.

Measurements were made at the wagon bridge 1 mile north of Brookwood, on the Peachtree road, and 6 miles north of Atlanta, Ga. The bench mark is the top of the iron plate on the first upright from the right end of the bridge, downstream side, 28.00 feet above the datum of the gage.

April 9, 1904: Width, 44 feet; area, 37 square feet; mean velocity, 1.54 feet per second; gage height, 1.12 feet; discharge, 57 second-feet.

May 20, 1904: Width, 43 feet; area, 25 square feet; mean velocity, 1.52 feet per second; gage height, 0.68 foot; discharge, 38 second-feet.

Peavine Creek.—This stream is the South Fork of Peachtree Creek. A measurement was made May 20, 1904, from the wooden bridge on the Cheshire Bridge road, about 1 mile east of Armour, Ga. The bench mark is the top of the head of the upper bolt used to bolt the second rail post from the right end of the bridge to the stringer at the lower side of the bridge. Its elevation is 16.00 feet above the datum of the gage.

Width, 14 feet; area, 13 square feet; mean velocity, 1.23 feet per second; gage height, 0.85 foot; discharge, 16 second-feet.

Red Oak Creek.—This stream enters Flint River from the right, 3 miles above the regular gaging station on Flint River near Woodbury, Ga. Measurements were made at a wooden wagon bridge about 1 mile above the mouth of the creek. The bench mark is the top of the first post from the right-bank edge, downstream side, 15 feet from a large white-oak tree; elevation, 20.00 feet above the datum of the assumed gage.

January 16, 1904: Width, 68 feet; area, 134 square feet; mean velocity, 1.24 feet per second; gage height, 4.12 feet; discharge, 166 second-feet.

October 4, 1904: Width, 18 feet; area, 27 square feet; mean velocity, 0.68 foot per second; gage height, 2.65 feet; discharge, 18 second-feet.

September 27, 1905: Width, 32 feet; area, 12 square feet; mean velocity, 0.83 foot per second; gage height, 2.25 feet; discharge, 10 second-feet.

May 29, 1906: Width, 62 feet; area, 157 square feet; gage height, 3.31 feet; discharge, 75 second-feet.

Rottenwood Creek.—This stream enters Chattahoochee River from the right. Measurements were made by wading at a point about 200 feet above the old Thornton dam, near Vinings, 2 miles above the mouth of the creek. The creek was believed to be at its lowest stage. The bench mark is a nail driven into rock on the right bank at the measuring section, marked "B. M." Its elevation is 3.00 feet above the datum of the gage.

October 4, 1904: Width, 9 feet; area, 6 square feet; mean velocity, 0.84 foot per second; gage height, 0.26 foot; discharge, 4.8 second-feet.

October 4, 1904: Width, 9 feet; area, 6 square feet; mean velocity, 0.82 foot per second; gage height, 0.26 foot; discharge, 4.9 second-feet.

October 4, 1904: Width, 9 feet; area, 6 square feet; mean velocity, 0.72 foot per second; gage height, 0.25 foot; discharge, 4.3 second feet.

Soque River.—Measurements were made from Wall's bridge, 2½ miles above Clarkesville. The bench mark is the top of a nail driven into a large leaning birch tree about 20 feet above the bridge on the left bank, 6.00 feet above the datum of the gage.

March 17, 1904: Width, 36 feet; area, 65 square feet; mean velocity, 1.83 feet per second; gage height, 1.35 feet; discharge, 119 second-feet.

March 17, 1904: Width, 36 feet; area, 63 square feet; mean velocity, 1.82 feet per second; gage height, 1.35 feet; discharge, 115 second-feet.

May 13, 1904: Width, 36 feet; area, 62 square feet; mean velocity, 1.92 feet per second; gage height, 1.45 feet; discharge, 119 second-feet.

Measurements were made at McHalister's bridge, about 7 miles from Cornelia and 1 mile above the mouth of the river. The bench mark is the top of the downstream end of the first wooden floor beam from the left bank, 22.00 feet above the datum of the gage.

March 18, 1904: Width, 74 feet; area, 152 square feet; mean velocity, 1.62 feet per second; gage height, 1.85 feet; discharge, 246 second-feet.

July 16, 1904: Width, 72 feet; area, 88 square feet; mean velocity, 1.47 feet per second; gage height, 1.25 feet; discharge, 130 second-feet.

Sweetwater Creek. — This stream enters Chattahoochee River from the right below the old station at Oakdale, Ga. A measurement was made March 15, 1904, at Adair's bridge, 2 miles north of Lithia Springs, and above the regular station on Sweetwater Creek near Austell, Ga. The bench mark is the top of the downstream end of the cap of first wooden bent from the left end of the bridge, 10.00 feet above the datum of the gage.

Width, 66 feet; area, 295 square feet; mean velocity, 1.37 feet per second; gage height, 1.50 feet; discharge, 404 second-feet.

A measurement was made March 15, 1904, at Ferguson's mill bridge, 5 miles from Austell. The bench mark is a nail driven into the river side of a birch tree on the right bank 12 feet below the bridge, 5.00 feet above the datum of the gage.

Width, 129 feet; area, 484 square feet; mean velocity, 1.67 feet per second; gage height, 1.50 feet; discharge, 807 second-feet.

Warm Springs.—These springs are located one-half mile from Warm Springs, Ga., a station on the Southern Railway. Two discharge measurements were made March 10, 1905, about 300 feet below the springs and about 75 feet above the mouth of the branch, which is formed by the united flow of the several springs. April 20, 1905, two measurements were made about 6 feet below the end of the stone walls at the outlet from the bath house.

March 10, 1905: Width, 5 feet; area, 2.8 square feet; mean velocity, 1.14 feet per second; discharge, 3.2 second-feet.

April 20, 1905: Width, 4 feet; area, 1.52 square feet; mean velocity, 0.97 foot per second; discharge, 1.47 second-feet.

April 20, 1905: Width, 2.6 feet; area, 2.12 square feet; mean velocity, 0.69 foot per second; discharge, 1.48 second-feet.

White Oak Creek.—This stream enters Flint River from the right, about 13 miles above the regular gaging station on Flint River at Woodbury, Ga. A measurement was made March 29, 1904, at the wagon bridge one-half mile west of Warnersville. The bench mark is the top of the first post on the downstream side of the bridge, 13.00 feet above the datum of the gage.

Width, 38 feet; area, 163 square feet; mean velocity, 0.71 foot per second; gage height, 1.25 feet; discharge, 115 second-feet.

A measurement was made March 29, 1904, at the double bridges one-half mile from Riverview. The bench mark is the top of the first post, 9.00 feet above the datum of the gage.

Width, 61 feet; area, 222 square feet; mean velocity, 0.50 foot per second; gage height, 2.36 feet; discharge, 112 second-feet.

Whitewater Creek.—This stream enters Flint River from the right. A measurement was made August 31, 1905, from the downstream side of a wooden highway bridge, locally known as the Lower Whitewater Bridge, about 4 miles northwest of Montezuma, Ga. The bench mark is the top of the downstream end of the cap of the third bent from the right bank; elevation, 12.00 feet above the datum of the assumed gage.

Width, 71 feet; area, 275 square feet; mean velocity, 0.94 foot per second; gage height, 2.14 feet; discharge, 260 second-feet.

RIVER SURVEYS IN APALACHICOLA RIVER DRAINAGE BASIN.

CHATTAHOOCHEE RIVER.[a]

The elevations along Chattahoochee River are based on the following surveys:

The portion from Columbus to West Point was surveyed in August, 1902, by W. E. Hall, levelman, under the direction of B. M. Hall, United States Geological Survey. The portion from West Point to Franklin was surveyed in 1899 by the Corps of Engineers, United States Army. The portion from Franklin to Oakdale was surveyed in 1903 by Joseph Palmer, levelman, under the direction of Fred A. Franck, United States Geological Survey. The elevations along this part of the stream are based on an aluminum tablet at the Washington street entrance to the State capitol building at Atlanta, marked "1050 M. C." The portion from Oakdale to the mouth of Chestatee River was surveyed in 1902 by Felder Furlow, levelman, under the direction of B. M. Hall, United States Geological Survey. The elevations between the mouth of Chestatee

a For survey of Chattahoochee River from junction with Flint River to Columbus, Ga., see Report of Chief of Engineers, U. S. A., 1872, pp. 584, 623; and Report of Chief of Engineers, U. S. A., 1873, pp. 699-700.

River and Nacoochee were determined in 1903 by Joseph Palmer, levelman, under the direction of F. A. Franck, field assistant, United States Geological Survey. These elevations are based on an aluminum tablet at Nacoochee, marked "1439 Atlanta," in the ledge of rock 200 feet west of ford of Chattahoochee River, the elevation of which is now accepted as 1,348.259 feet above main sea level. The adjustment of this line was accomplished in conjunction with leveling on the Chestatee and Soque rivers, tied at Willow and Clarkesville, and by an extra check at Pole, to primary level circuits, and accords with the 1903 adjustment of the precise level net.

In order to give a continuous profile of the river, the levels of these several surveys have been adjusted to accord with the elevations determined for the portion between Franklin and Oakdale. It is not expected, however, that the bench marks of one survey will exactly accord with those of another.

Elevations on Chattahoochee River from Columbus up to Nacoochee.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.00	Tail water 100 feet below Eagle and Phoenix dam tailrace	190
0.02	Above Eagle and Phoenix dam, water surface	216.2
0.74	100 feet below City Mills dam, water surface	216.6
0.75	Above City Mills dam, water surface	225
2.06	100 feet below Columbus Power Company's dam, water surface	226
2.08	Top of Columbus Power Company's dam, water surface	266
2.6	Bench mark on solid rock on east bank at lower land line of Chattahoochee Falls Company's property	270.75
2.8	Upper end of Columbus Power Company's backwater from dam, water surface	266
3.29	600 feet below old Clapp factory, water surface	276
3.44	Above old Clapp factory, water surface	300.3
3.56	Mouth of Roaring Creek (from Georgia bank), water surface	300.6
3.97	Water at upper line of Chattahoochee Falls Company's property, water surface	305.3
5.54	Bench mark on root of small water-oak tree on east bank of river, 400 feet below mouth of Standingboy Creek	321.6
5.62	Mouth of Standingboy Creek, water surface	315.6
6.49	Upper end of Narramores Island, water surface	316.1
7.21	Bench mark on mulberry tree, 40 feet below wire fence between Narramore and Biggers	328.71
7.21	Land line between Narramore and Biggers, water surface	317.6
7.55	Bench mark on large water oak 10 feet below land line between J. L. and B. A. Biggers	332.64
7.55	Land line between J. L. and B. A. Biggers, water surface	318.2
8.06	Ford to Island, water surface	319.7
8.82	Water surface	323.4
9.11	Opposite mouth of creek from west bank, water surface	323.5
10.07	Lower end of Allie Bigger's Island, water surface	323.6
10.26	Land line between Allie Biggers and Geo. Ogletree, water surface	323.7
10.87	Upper end of Allie Bigger's Island, water surface	324.7
11.08	Bench mark on large maple on bank opposite foot of shoals on Ogletree's land	340.52
11.08	Foot of shoals on Ogletree's land, water surface	326.5
11.32	Water surface	330.5
11.4	Bench mark on large ironwood tree near water	337.95
11.4	Water surface	333.3
11.51	....do	334.3
12.14	Bench mark on large dead cedar 10 feet below mouth of Cowpen Creek	351.19
12.14	Mouth of Cowpen Creek, water surface	345.9
12.51	Water surface	349.4
12.67	....do	350.1
12.69	....do	351.1
13.44	Bench mark on pine tree 75 feet below mouth of Mulberry Creek	367.23
13.44	Mouth of Mulberry Creek, water surface	362.8
14.84	Water surface	366.5
14.9	....do	368.2
15.53	....do	375.9
16.91	Near mouth of Sue Slaton Branch, water surface	390.6
17.5	Bartletts Ferry, water surface	394.7
17.63	Water surface	400
18.2	Mouth of Mossy Creek, water surface	411.8
19.31	Lower end of Harrington Island, water surface	431
19.77	Water surface	442.5
19.86	Lower end of Phipps Island, water surface	443.6
20.85	Water surface	461.3
21.08	....do	467.1
21.45	Lower end of Hargetts Island, water surface	475.8
22.33	Mouth of Mountain Oak Creek, water surface	480.7
22.89	Water surface	482.5
23.16	Foot of shoals, water surface	482.6
23.54	Blantons Ferry, water surface	484.1
24.87	Houstons Ferry, water surface	491.3
28.12	Below River View dam, west side, water surface	518
28.14	Above River View dam, water surface	529
30.17	Below dam at Langdale mills, water surface	532
30.2	Top of dam or water above dam	542
33.99	Water surface	550
35.0	West Point milepost 38, from Franklin	565.14
35.0	West Point, zero of gage	549.46
35.0	West Point, wagon bridge, water surface (gage height, 2.0 feet)	551.5
35.5	Mouth of Osceligee Creek, water surface	555.9
36.0	Milepost 37, from Franklin	571.15
36.0	Water surface	556.6
37.0	Milepost 36, from Franklin	572.68
37.0	Water surface	556.9
37.6	Water at mouth of Anderson Creek	567.6
38.0	Milepost 35, from Franklin	577.94

Elevations on Chattahoochee River from Columbus up to Nacoochee—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
38.0	Water surface	558.2
38.3	Opposite mouth of Maple Creek, east	558.9
39.0	Milepost 34, from Franklin	571.95
39.0	Water surface	560.8
40.0	Milepost 33, from Franklin	575.60
40.0	Head of Henderson Island, water surface	561
40.3	Potts Island, water surface	562.5
41.0	Milepost 32, from Franklin	574.38
41.0	Water surface	564.6
42.0	Milepost 31, from Franklin	579.48
42.0	Water surface	568.1
42.2	Lower end Hughleys Island, water surface	569.7
43.0	Milepost 30, from Franklin	582.36
43.0	Upper end Hughleys Island, water surface	572.8
43.5	Mouth of Wohadkee Creek, west side, water surface	577.1
44.0	Milepost 29, from Franklin	591.71
44.0	Water surface	576.3
44.5	Hunters old ferry, water surface	576.9
45.0	Milepost 28, from Franklin	593.43
45.0	Water surface	576.9
45.3	Double Mills bridge, water surface	576.9
46.0	Milepost 27, from Franklin	592.51
46.0	Water surface	579.9
47.0	Milepost 26, from Franklin	590.42
47.0	Water surface	580
48.0	Milepost 25, from Franklin	593.61
48.0	Water surface	580.7
48.5	Mouth of Whitewater Creek, water surface	580.8
49.0	Milepost 24, from Franklin	595.51
49.0	Water surface	581.2
50.0	Milepost 23, from Franklin	597.48
50.0	Water surface	583
50.5	McGees Bridge, water surface	583.1
51.0	Milepost 22, from Franklin	596.29
51.0	Opposite mouth of Yellow Jacket Creek, east side, water surface	583.4
51.3	Lower end of Birdsay Island, water surface	584.1
51.8	Upper end of Birdsay Island, water surface	586.6
51.9	Lower end of Reids Island, water surface	586.9
52.0	Milepost 21, from Franklin	603.06
52.0	Water surface	586.9
52.8	Upper end of Reids Island, water surface	587
53.0	Milepost 20, from Franklin	600.75
53.0	Water surface	589.9
54.0	Milepost 19, from Franklin	608.55
54.0	Water surface	591.3
54.3	Head of shoals, water surface	592.8
55.0	Milepost 18, from Franklin	606.34
55.0	Water surface	593.7
55.3	do	594
56.0	Milepost 17, from Franklin	602.29
56.0	Water surface	595.4
56.3	Mouth of Wolf Creek, water surface	595.7
57.0	Milepost 16, from Franklin	613.71
57.0	Water surface	596.2
57.9	Moodys Bridge, water surface	596.8
58.0	Milepost 15, from Franklin	615.80
58.0	Water surface	597.1
59.0	Milepost 14, from Franklin	615
59.2	Mouth of Haralson Creek, water surface	599.4
59.9	Lower end of Swanson Island, water surface	599.6
60.0	Milepost 13, from Franklin	616.99
60.0	Water surface	599.9
60.5	Upper end of Swanson Island, water surface	600.8
61.0	Milepost 12, from Franklin	618.30
61.0	Water at head of Swanson Shoals, water surface	605.2
61.4	Water surface	605.8
62.0	Milepost 11, from Franklin	622.18
62.0	Water surface	607 3
62.5	do	607.7
63.0	Milepost 10, from Franklin	630.21
63.0	Water surface	608
64.0	Milepost 9, from Franklin	627.71
64.0	Water surface	608.2
64.1	Opposite mouth of Potato Creek, east side, water surface	608.7
64.5	Philpots Ferry, water surface	609.2

Elevations on Chattahoochee River from Columbus up to Nacoochee—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
64.8	Opposite mouth of New River, from east side, water surface	609.3
65.0	Milepost 8, from Franklin	634.66
65.0	Water surface	609.6
65.5	.....do	609.6
66.0	Milepost 7, from Franklin	628.50
66.0	Water surface	610.4
66.2	Foot of Jackson Shoals, water surface	610.4
66.7	Mouth of Brushy Creek, from west side, water surface	611.5
67.0	Milepost 6, from Franklin	628.13
67.0	Water surface	613
67.7	Mouth of branch, water surface	618
67.8	Head of Jacksons Shoals, water surface	618.7
68.0	Milepost 5, from Franklin	629.75
68.0	Water surface	618.7
69.0	Milepost 4, from Franklin	631.45
69.0	Foot of Linville Shoals, water surface	618.7
69.4	Head of Linville Shoals, water surface	620
70.0	Milepost 3, from Franklin	637.91
70.0	Water surface	620.8
70.6	Mouth of Hillabeehatchee Creek, west side, water surface	621.7
71.0	Milepost 2, from Franklin	636.01
71.0	Water surface	622
71.5	.....do	622.4
72.0	Milepost 1, from Franklin	636.10
72.0	Water surface	623.1
72.4	.....do	624.6
72.6	.....do	625
73.0	Milepost 0, from Franklin	634.86
73.0	Franklin, above bridge, water surface	626
73.0	Franklin, rivet on top of left iron pier, east approach, wagon bridge	655.17
73.0	Franklin, water surface	626
	Franklin, bronze tablet, marked "695 A," in south side of court-house	694.742
74.0	Foot of shoal, surface of water	627
74.2	Centralhatchee Creek, birch tree opposite mouth	633.49
74.2	Water surface	628
75.8	Foot of Shoals, water surface	628
76.0	Head of Shoal, water surface	632
77.0	Foot of shoal, water surface	632
77.2	Head of shoal, water surface	634
77.8	Foot of shoal, water surface	634
78.0	Head of shoal, water surface	638
79.0	Bushyhead Shoals, white oak opposite foot	648.15
79.0	Water surface	638
79.5	Head of Bushyhead Shoals, birch at head of island	653.32
79.5	Water surface	645
80.0	Head of shoal, water surface	658.73
80.0	Water surface	650
	Fishtrap Shoal, foot of, water surface	648
81.1	Fishtrap Shoal, elm tree on rock bluff opposite center	670.26
81.1	Water surface	652
81.7	Fishtrap Shoal, head of, water surface	657
82.7	Sweet gum, right bank, one-fourth mile below Pink Creek	664.97
82.7	Water surface	658
83.0	Mouth of Pink Creek, water surface	658
84.9	Hollingsworth Ferry, water oak, right bank	673.31
84.9	Hollingsworth Ferry, water surface	658
86.0	Bench mark on pine	678.8
86.0	Water surface	659
87.1	Mouth of Yellow Dirt Creek, water surface	660
87.3	Sweet gum tree one fourth mile above Yellow-Dirt Creek	679.8
87.3	Water surface	662
88.0	Browns Ferry, walnut tree, right bank	681.96
88.0	Browns Ferry, water surfuace	662
89.0	Birch tree on right bank at mouth of Whooping Creek	670.2
89.0	Water surface	664
90.4	Foot of small shoal, water surface	666
90.45	Head of small shoal, water surface	667
91.9	Culpepper Creek, red oak on right bank at mouth	678.04
91.9	Water surface	667
92.6	Foot of McIntosh Shoal, sweet-gum tree	679.49
92.6	Water surface	668
93.1	Head of McIntosh Shoal, water surface	676
94.1	Houstons Ferry, foot of shoal, catalpa tree	684.62
94.1	Water surface	677
94.4	Head of Hanson Shoal, water surface	678

Elevations on Chattahoochee River from Columbus up to Nacoochee—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
95.8	Foot of Friesdell Shoal, water surface	679
95.4	Head of Friesdell Shoal, water surface	680
96.2	Foot of small shoal, water surface	681
96.3	Head of shoal just below Rees Ferry, water surface	682
96.6	Rees Ferry, ash tree, right bank	693.86
96.6	Water surface	682
97.3	Poplar tree, one-half mile below Central of Georgia Railway bridge	699.76
97.3	Water surface	682
97.9	Willow on right bank, 40 feet above Central of Georgia Railway bridge	692.12
97.9	Water surface	684
98.7	Foot of shoals, water surface	684
98.8	Head of shoals below Moores Ferry, water surface	685
99.4	Moores Ferry, large birch, right bank	702.85
99.4	Moores Ferry, water surface	686
100.3	Foot of shoal below Snake Creek, water surface	687
100.5	Willow tree, 100 yards above mouth of Snake Creek	696.72
100.5	Water surface	688
102.0	Water oak opposite lower end of island	703.87
102.0	Water surface	689
102.9	Pine opposite head of island, right bank	709.11
102.9	Water surface	692
104.6	Hutchinson Ferry, maple on right bank, 20 feet from river	709.12
104.6	Hutchinson Ferry, water surface	694
105.9	Foot of Mederis shoal, mouth of Wolf Creek, water surface	698
106.2	White oak, side of rock bluff, right bank	716.81
106.2	Water surface	702
106.6	Head of Mederis Shoal, water surface	704
106.9	Foot of Ballard Shoal, water surface	704
107.1	Head of Ballard Shoals, willow 10 feet from river, right bank	711.13
107.1	Water surface	705
108.4	Jones Ferry, pine tree on left bank	718.6
108.4	Jones Ferry, water surface	706
109.9	Defers Ferry, large birch on left bank	722.92
109.9	Defers Ferry, water surface	709
111.4	Walnut about 2 miles below Big Bear Creek, and near a point opposite mouth of Dog River	725.5
111.4	Water surface	710
112.5	One mile below Big Bear Creek, water surface	711
113.5	Poplar at mouth of Big Bear Creek	730.35
113.5	Water surface	712
114.6	Pumpkintown Ferry, large birch left bank, 15 feet from river	727.94
114.6	Pumpkintown Ferry, water surface	712
116.0	Riverton Ferry, sycamore 10 feet from river on left bank	720.64
116.0	Riverton Ferry, water surface	714
116.3	Mouth of Pea Creek, water surface	714
116.7	Foot of Redmans Shoal, water surface	714
116.8	Head of Redmans Shoal, sycamore on left bank, 10 feet from river	728.58
116.8	Water surface	716
117.4	Brocks Ferry, white oak on left bank, 10 feet from river	730.49
117.4	Brocks Ferry, water surface	716
119.1	One mile below Campbellton Ferry, water surface	718
120.1	Campbellton Ferry, sycamore 10 feet from river, left bank	728.69
120.1	Campbellton Ferry, water surface	719
121.0	Walnut on left bank, one-fourth mile below Camp Creek	741.78
121.0	Water surface	719
121.4	Mouth Camp Creek, ash tree, left bank	736.13
121.4	Water surface	720
123.2	Walnut, on left bank, 70 feet from river	746.29
123.2	Water surface	721
123.7	Water surface	721
125.2	Dupres Ferry, elm tree on left bank	738.09
125.2	Dupres Ferry, water surface	723
126.7	Large walnut on left bank	747.58
126.7	Water surface	725
127.7	Aderholts Ferry, large sycamore opposite mouth of Sweetwater Creek	744.78
127.7	Aderholts Ferry, water surface	726
129.6	Sweet gum, left bank	742.16
129.6	Water surface	727
130.6	Walnut on left bank, just above Buzzard Roost Island	752.9
130.6	Water surface	729
131.6	Walnut on left bank, opposite a point near the mouth of Landers Creek	746.41
131.6	Water surface	730
132.6	Walnut, 40 feet from river, left bank	755.1
132.6	Water surface	732

Elevations on Chattahoochee River from Columbus up to Nacoochee—Continued.

Distance	Description of points	Elevation above sea level
Miles		
133.9	Garretts Bridge, water oak, left bank	752.94
133.9	Garretts Bridge, water surface	735
134.6	Sycamore, 10 feet from left bank, at old ferry	751.35
134.6	Water surface	736
135.5	Mouth of Nickajack Creek, water surface	736
136.4	Three hundred feet below Mason and Turners Ferry and 200 feet from river, hickory tree, left bank	754.38
136.4	Water surface	738
137.5	Near mouth of Proctors Creek, willow tree, left bank	741.82
137.5	Water surface	739
138.0	Oakdale, United States Geological Survey gaging station, water surface (gage 1.7)	739.5
138.0	Oakdale, zero of gage at Southern Railway bridge	737.8
138.6	Water surface	740
140.1	White oak, 50 feet from river, 70 feet below mouth of Peachtree Creek	763.37
140.1	Mouth of Peachtree Creek, from east bank, water surface	742.6
140.6	Mouth of small branch, water surface	744.1
141.1	Rock-bluff, east bank, water surface	745.1
141.5	Water surface	745.7
141.7	Foot of shoals, water surface	746.2
141.8	Water surface	748.3
142.1	Water surface	751.2
142.5	Paces Ferry, willow tree, upper side of east bank landing	761
142.5	Paces Ferry, water surface	752.7
142.7	Water surface	752.9
143.0	Birch tree at mouth of Little Nancy Creek, west bank of river, lower bank of creek	768.06
143.0	Water surface	754
143.1	Lower end of Long Island (Thornton place), water surface	755.2
143.2	Water surface	757.3
143.4	Pace's mill site, water surface	759.5
143.7	Large ash tree at mouth of Rottenwood Creek, lower side of creek	771
143.7	Water surface	762
144.0	Opposite mouth of Long Island Creek, water surface	764.3
144.2	Water surface	764.4
144.4	Sweet-gum tree at "The Narrows"	765.71
144.4	Water surface	770.3
144.6	Water surface	772.4
144.8	Water surface	776.8
145.0	Water surface	780.6
145.5	Powers Ferry, white-oak tree, west bank	794.21
145.5	Water surface	780.8
146.0	Land line between Power and McKenzie	787.2
147.4	Heards Ferry forked ash tree, mouth of Soap Creek, lower bank	799.46
147.4	Heards Ferry, water surface	790.3
149.1	Johnsons Ferry, large water-oak tree, west landing, downstream side of road. (This is old bench mark marked 118.52)	806
149.1	Johnsons Ferry, water surface	793.3
150.9	Dam site, Bull Sluice water power (dam is being built here), water surface	800
151.2	Water surface	803.6
151.4	Water surface	804.8
151.5	Water surface	806.2
152.0	Large red oak, 150 feet from river, and 200 feet below Power's old mill	837.66
152.1	Water surface	820.4
152.1	Above Power's old mill dam, water surface	823.6
152.2	Water surface	824.5
152.5	Water surface	829.2
152.7	Water surface	829.5
152.8	Birch, mouth of Willioe Creek, upper bank	836.04
152.8	Water surface	831.4
153.6	Water surface	835.3
153.9	Large water-oak above mouth of branch	842.12
153.9	Mouth of branch, west bank of river, water surface	835.9
154.2	Water surface	839.1
154.3	Water surface	841
154.6	Water surface	843.9
154.8	Water surface	846.1
155.2	Mouth of Vickerys Creek, sweet-gum tree, lower bank of creek	851.78
155.2	Water surface	849.6
156.7	Near mouth of Seven Creek, water surface	852.6
157.0	Foot of Ford Island, water surface	855.4
157.1	Water surface	857.3

Elevations on Chattahoochee River from Columbus up to Nacoochee—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
157.4	Water surface	859
157.4	Water surface	859.1
157.9	Jetts Ferry root of 4 willows upper side, west landing	866.97
157.9	Water surface	862
158.7	Water surface	862.5
159.2	Water surface	862.7
160.5	Nesbits Ferry, large birch, west landing	870.65
160.5	Nesbits Ferry, water surface	863.2
162.5	Holcombs Ferry, water-oak at west landing, fifty feet from river, upper side of road	881.17
162.5	Holcombs Ferry, water surface	865.6
163.0	Water surface	867.8
163.2	Mouth Holcombs Mill Branch, west side river	869.2
163.6	Water surface	869.9
164.6	Water surface	874
164.9	Foot of Jones Shoals, water surface	875.6
165.8	Head of Jones Shoals, water surface	880.5
165.85	Jones Ferry, large oak, west landing, 50 feet from river	886.5
165.85	Jones Ferry, water surface	880.5
166.7	Water surface	880.7
167.6	Medlocks Bridge, top of iron tubular pier west bank, down stream	906.40
167.6	Medlocks Bridge, water surface	880.7
168.0	West landing of McClure or Warsaw Ferry, birch 100 feet from bank	897.40
168.0	Water surface	882
170.4	Abbotts Ferry, water surface	884
171.6	Rogers Ferry, large beech tree, west landing, on downstream side of road	894.78
171.6	Rogers Ferry, water surface	885.7
174.3	Littles Ferry, west landing, twin persimmon tree 100 feet from bank, on downstream side of road	905.35
174.3	Littles Ferry, water surface	889.3
176.1	Hutchins Ferry, west landing, large walnut tree 150 feet from bank, on downstream side of road	914.69
176.1	Hutchins Ferry, water surface	895.6
177.7	Terry's Ferry, sycamore tree at upper side of west landing	909.16
177.7	Terry's Ferry, water surface	898.8
180.13	Stricklands Bridge, top of stone pier, west bank	933.14
180.3	Stricklands Bridge, center of pulley of wire gage (U. S. G. S. gage; height at time, 1.1 foot)	936.34
180.3	Water surface	903.9
180.3	Walnut on edge of road, 75 feet from approach of bridge, west side of river	930.84
180.9	Mouth of small branch from west side, water surface	905.4
182.4	Parker Ferry (no longer used as ferry), water surface	913.4
182.9	Water surface	918
183.3	Water surface	919.3
183.5	Head Winding Shoals at upper end of island, water surface	921.2
184.0	Pirkles Ferry, poplar tree on edge of road near west landing	932.18
184.0	Water surface	922.8
184.5	Forked hickory tree on Pirkle's upper land line, 50 feet from west bank of river	940.33
184.5	Water surface	926.9
185.1	Water surface	927.5
186.0	Shadburns Ferry, sycamore tree, west landing	935.96
186.0	Water surface	928.4
189.0	Walnut tree 100 feet west of bank at Light's old ferry place	958.46
189.8	Top of cylindrical iron pier, downstream, east bank, wagon bridge opposite Flowery Branch	961.48
189.8	Water surface	933.5
190.9	Water surface	936.5
192.9	Below dam at gristmill, water surface	944.4
192.9	Above dam at gristmill, water surface	953.2
192.9	Oak tree just above gristmill, on east side of river	960.7
192.9	Browns Bridge, water surface	953.2
193.5	Near Brown's house, west side of river, water surface	953.7
193.8	Mouth of Brown Creek from west side, water surface	954
195.4	Near Keiths Bridge, mouth of Chestatee River, nail in root of walnut tree	964.37
	Head of shoals above mouth of river, water surface	956
197.1	Nail in root of walnut tree, north bank	969.71
199.1	Foot of shoals, water surface	960
199.1	Head of shoals, water surface	963
	Nail in root of large walnut tree at edge of public road opposite small shoal	985.61
201.1	Water surface	965
201.6	Water surface	966
202.2	Iron bridge, nail in root of large walnut tree	980.26
202.2	Foot of shoals, water surface	967

Elevations on Chattahoochee River from Columbus up to Nacoochee—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
202.7	Head of shoals, water surface	972
203.7	Thompson Bridge, nail in root of large walnut tree	998.36
203.7	Thompson Bridge, water surface	977
204.8	Little River, foot of shoals at mouth, water surface	978
204.8	Head of shoals, water surface	984
205.4	Nail in root of white oak on north side of bluff, 100 yards below North Georgia Electric Company's new dam	1,004.04
205.4	Water surface	985
206.4	Chattahoochee Park, nail in birch tree on east side of river and at sharp bend	1,004.27
	Foot of shoals, water surface	996
	Head of shoals, water surface	1,010
207.6	Spike in root of large oak tree near small store building near Gainesville	1,028.32
207.6	Bridge, water surface	1,011
208.6	Nail in root of willow on south bank 6 feet from water	1,014.94
208.6	Water surface	1,012
209.3	Foot of shoals, water surface	1,012
	Head of shoals, water surface	1,014
211.6	Clarks Bridge, east side of river, large maple tree, nail in root of	1,039.81
211.6	Clarks Bridge, water surface	1,017
212.6	Small bluff, north side of river, poplar tree, nail in root of	1,045.27
212.6	Water surface	1,020
214.6	Red-oak tree, nail in root of	1,043.29
	Foot of shoals, water surface	1,025
214.9	Foot of shoals, water surface	1,028
	Head of shoals, water surface	1,032
216.6	Savage Ferry, nail in notch of oak post	1,051.3
216.6	Water surface	1,034
217.6	Left bank of river, nail in root of birch tree	1,050.46
217.6	Water surface	1,037
219.3	North bank of river, nail in root of water oak tree	1,046.76
219.3	Water surface	1,038
219.3	Head of shoals, water surface	1,040
220.3	Seven Island Shoals, opposite foot of, large poplar tree, nail in root of	1,066.94
	Foot of shoals, water surface	1,040
	Head of shoals, water surface	1,044
221.0	Flat Creek, 1 mile above mouth of, nail in root of poplar tree	1,045.84
221.0	Water surface	1,045
221.9	Lulu Bridge, 60 feet below, on north bank of river, red oak tree, nail in root of	1,065.6
221.9	Water surface	1,049
224.2	Walnut tree, in large open bottom, left bank of river, nail in root of	1,076.23
224.2	Water surface	1,053
225.2	Belton Bridge, 100 yards below, right bank of river, walnut tree, nail in root of	1,076.64
225.2	Water surface	1,056
227.2	Right bank of river, pine tree, nail in root of	1,092.99
227.2	Foot of shoals, water surface	1,061
227.3	Head of shoals, water surface	1,069
228.0	Nail in root of birch tree	1,085.79
228.0	Water surface	1,070
	Foot of shoals, water surface	1,071
	Head of shoals, water surface	1,073
228.5	Head of shoals, on side of bluff, large pine opposite, nail in root of	1,092.33
228.5	Water surface	1,082
228.6	Harrisons Shoals, foot of, water surface	1,084
229.5	Harrisons Shoals, opposite, nail in root of oak tree	1,101.7
229.5	Harrisons Shoals, water surface	1,087
	Harrisons Shoals, head of, mouth of Mossy Creek, water surface	1,087
229.6	Mountain Island Shoals, foot of, water surface	1,088
	Head of shoals, water surface	1,096
229.9	Head of shoals opposite, nail in root of white oak,	1,109.76
230.6	Foot of shoals, water surface	1,101
230.6	Head of shoals, water surface	1,106
230.6	Perkins Shoals, opposite foot of, nail in root of water oak	1,113.68
230.6	Perkins Shoals, foot of, water surface	1,107
	Perkins Shoals, head of, water surface	1,113
232.7	Foot of shoals, water surface	1,118
	Head of shoals, water surface	1,128
232.8	Head of shoals, north bank of river, opposite, nail in root of black gum tree	1,127.76
233.6	Foot of shoals, water surface	1,127
233.6	Head of shoals, water surface	1,130
233.7	Duncans Bridge, 30 feet below, nail in red oak tree	1,148.9
233.8	Foot of shoals, water surface	1,131
234.0	Head of shoals, water surface	1,135
234.0	Head of shoals, opposite, nail in root of water oak	1,155.41
234.7	Soque River, south bank, at mouth, nail in root of birch tree	1,147.82
234.7	Water surface	1,137

Elevations on Chattahoochee River from Columbus up to Nacoochee—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
234.7	Soque River, mouth of, in forks of river, nail in root of pine stump	1,148.86
235.0	Head of shoals, water surface	1,144
235.2	Foot of shoals, water surface	1,149
235.4	Head of shoals, water surface	1,159
235.4	Head of shoals, opposite, on west bank of river, nail in root of red oak	1,165.2
235.9	Long Shoals, head of, water surface	1,178
236.2	Foot of shoals, water surface	1,178
	Head of shoals, water surface	1,216
237.2	Head of shoals, root of hickory tree	1,222.10
237.7	Irwins Bridge, 10 feet below, left bank of river, nail in root of poplar tree	1,223.37
237.7	Water surface	1,216
238.0	Irwins Bridge, just above, water surface	1,222
238.6	Head of shoals, water surface	1,228
238.9	Foot of shoals, water surface	1,229
	Head of shoals, water surface	1,242
238.9	Blue Creek, water surface	1,243
239.0	Blue Creek, 100 yards below mouth of, nail in root of red oak tree	1,256.09
239.6	Amos Ford, on west bank, large birch tree, nail in root of	1,256.09
239.6	Amos Ford, water surface	1,244
239.9	Water surface	1,247
240.4	Head of shoals, water surface	1,250
241.4	Allens Bridge, west end of, red oak tree, nail in root of	1,266.49
241.4	Allens Bridge, water surface	1,256
	Head of shoals, water surface	1,259
242.2	Foot of shoals, water surface	1,260
	Head of shoals, water surface	1,263
242.2	Head of shoals, opposite, nail in root of birch tree	1,264.18
242.7	Foot of shoals, water surface	1,271
	Head of shoals, water surface	1,274
242.9	Shoals, opposite, head of, nail in root of pine tree	1,280.73
243.9	Foot of shoals, water surface	1,276
244.4	Head of shoals, water surface	1,280
244.4	Shoals, red oak, opposite head of, nail in root of	1,285.53
244.6	Sharp bend of river, water oak tree, nail in root of	1,304.53
	Water surface	1,292
245.9	Suspension footbridge, poplar tree at, nail in root of	1,305.97
245.9	Water surface	1,297
247.2	Foot of shoals, water surface	1,299
	Head of shoals, water surface	1,306
248.4	Sautee Creek, near mouth of, in Nacoochee Valley, water surface	1,309
250.4	Sautee Creek, ford near mouth, water surface	1,339
250.4	Nacoochee post-office, 200 feet west of ford at Chattahoochee River, 6 feet above surface of road, on ledge of rock aluminum tablet marked "1349 Atlanta"	1,348.269

SURVEY OF SOQUE RIVER.

The elevations in the following list are based on an aluminum table at the north side of east entrance to the court-house at Clarkesville, marked "1372 ATLANTA," the elevation of which is accepted as 1,371.991 feet above mean sea level in accord with the 1903 adjustment of the precise level net.

The leveling was done by Joseph Palmer, levelman, in September, 1903, under the direction of F. A. Franck, field assistant, United States Geological Survey.

Elevations on Soque River from mouth up to Clarkesville.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Soque River, mouth, at junction with Chattahoochee River, nail in root of birch tree, on south bank	1,147.82
0.0	Soque River, mouth of, water surface	1,137
1.6	McAllister's Bridge, near north end, nail in root of white oak tree	1,156.30
1.6	McAllister's Bridge, water surface	1,142
	Foot of shoals	1,142
	Head of shoals	1,149
4.0	New Bridge, hickory on north bank, nail in root	1,171.71
4.0	New Bridge, water surface	1,152
4.1	Foot of shoals, water surface	1,153
	Head of shoals, water surface	1,156
4.7	Foot of shoals, water surface	1,156
	Head of shoals, water surface	1,162
5.6	Foot of shoals, water surface	1,166
5.7	Head of shoals, water surface	1,181
6.1	Porters mills, foot of Porter Shoals, water surface	1,189
6.1	Head of Porters Shoals, water surface	1,227
6.1	Near north end of wagon bridge, red oak tree, nail in root of	1,246.13
6.2	Foot of upper shoals, water surface	1,238
	Head of upper shoals, water surface	1,253
6.3	200 yards above factory, near river, on root of water oak	1,262.75
7.3	Foot of shoals, water surface	1,261
7.3	Left bank of river, nail in root of sycamore tree	1,287.37
7.3	Water surface	1,284
8.8	Clarkesville, Habersham County courthouse, on north side of east entrance aluminum tablet marked "1872 ATLANTA."	1,371.991
8.8	Clarkesville, water surface	1,289

SURVEY OF CHESTATEE RIVER.

The elevations in the following list are based upon a bronze tablet 2.5 miles north of Willow, in rock on the west side of the river at a fork of the road, marked "1529 ATLANTA," the elevation of which is accepted as 1,528.649 feet above mean sea level in accord with the 1903 adjustment of the precise level net.

The leveling was done by Joseph Palmer, levelman, in October, 1903, under the direction of F. A. Franck, field assistant, United States Geological Survey.

Elevations on Chestatee River from mouth to Willow.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Bench mark, nail in root of walnut tree near Keiths Bridge mouth of Chestatee River, near Chestatee	964.37
1.1	Bench mark, nail in red-oak tree, 40 feet from east bank, near mouth of branch	961.76
3.1	Walnut tree, nail, 20 feet from river, in open field	975.87
3.1	Water surface	960
4.3	Water surface	963
5.1	Sycamore tree, nail, east bank of river	974.48
5.1	Water surface	964
6.8	Water surface	970
6.9	Root of red-oak tree, nail, 40 feet below mouth of Langleys Creek, east side	989.34
6.9	Water surface	972
7.8	Foot of dam at mill, water surface	977
7.8	Top of dam at mill, water surface	983
7.9	Top of iron bolt, west side of east approach, painted white	1,001.28
7.9	Water surface	984
8.1	Root of pine stump, nail, near Boldings Bridge, 40 feet from river, east bank	999.56
8.9	Red-oak tree, nail in root, 40 feet from river, east bank	1,003.69
9.2	Mouth of small creek, water surface	986
10.8	Water surface	998
	Foot of dam, water surface	1,000
11.0	Top of dam, water surface	1,003
11.9	Foot of shoals, water surface	1,005
12.0	White oak tree, nail in root, at side of rock bluff, left bank	1,020.21
12.0	Water surface	1,009
	Robinsons Ford, water surface	1,012
13.0	Red-oak tree, nail in root, 10 feet from river at Robinsons ford	1,025.30
	Foot of small shoal, water surface	1,014
	Head of small shoal, water surface	1,016
14.2	Water surface	1,017
14.3	Red-oak tree, nail in root, 50 yards below mouth of Yellow Creek	1,048.27
14.3	Water surface	1,022
15.2	Pine tree, nail in root, opposite shoals	1,049.28
15.2	Foot of shoals, water surface	1,024
15.2	Top of shoals, water surface	1,027
17.4	Small pine tree, nail in root, 50 feet from river on east bank	1,062.63
17.4	Water surface	1,028
17.5	Foot of small dam, water surface	1,039
	Head of small dam, water surface	1,043
17.5	Iron bolt, top of center pier, west side new bridge at Newbridge	1,060.43
	Foot of North Georgia Electric Company's dam, water surface	1,043
17.7	Top of North Georgia Electric Company's dam, water surface	1,070
19.8	Pine tree, nail in root, left bank	1,079.43
20.9	Head of shoal, water surface	1,070
21.5	Foot of shoal, water surface	1,075
21.6	Head of shoal, water surface	1,079
22.6	Brierpatch Bridge, top of iron bolt, south side of east approach	1,104.71
22.6	Brierpatch Bridge, water surface	1,082
23.5	Foot of small shoal	1,084
23.8	Red-oak tree, nail in root, near mouth of branch	1,106.49
23.8	Water surface	1,089
	Persimmon tree, nail in root	1,114.62
24.9	Foot of dam, water surface	1,092
	Top of old dam at stamping mill, water surface	1,104
27.1	Foot of shoals, water surface	1,106
	Iron bridge, water surface	1,109
27.8	Beech tree, nail in root, 60 feet below iron bridge	1,121.86
	Foot of Chestatee dam, water surface	1,115
27.5	Top of Chestatee dam, water surface	1,119
29.9	Foot of shoal, water surface	1,122
30.1	Top of shoal, water surface	1,125
30.7	Beardens Bridge, iron bolt, top of stone pier on west approach	1,150.10
30.7	Beardens Bridge, water surface	1,130
31.3	Three-fourths mile south of gorge dam, water surface	1,133
31.8	Foot of shoals below dam, water surface	1,138
31.9	Hickory tree, nail, 40 feet below the gorge dam	1,159.21
32.8	Foot of shoal, water surface	1,150
33.1	Top of shoal, water surface	1,155
33.7	White-oak tree, nail in root	1,166.95
33.7	Water surface	1,160
	Foot of shoal, water surface	1,163
34.2	Top of shoal, water surface	1,169
34.9	White-pine tree, nail in root, right bank of river	1,183.54
	Foot of shoals, water surface	1,174
35.1	Head of shoals, water surface	1,187
35.8	Foot of shoals, water surface	1,189

Elevations on Chestatee River from mouth to Willow—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
36.0	Head of shoals, water surface	1,200
36.1	Hickory tree, nail in root	1,214.84
36.1	Foot of shoals, water surface	1,201
36.3	Top of shoals, water surface	1,206
36.5	Foot of shoals, water surface	1,207
36.5	Large rock, right bank, 100 yards below ford, marked "X" with chisel	1,218.11
36.6	Grindle lower ford, water surface	1,209
	White-oak tree, on side of rock bluff, in fork between Chestatee and Tesnatee rivers	1,231.37
37.0	Foot of shoals at mouth of Tesnatee River, water surface	1,215
37.4	Head of shoals, water surface	1,262
37.7	Large birch tree, nail in root near ford	1,295.45
37.8	Foot of shoals at Grindle ford, water surface	1,263
38.3	Head of shoals, water surface	1,293
	Sweet-gum tree, nail, left bank, opposite foot of shoals	1,308.10
	Foot of shoals, water surface	1,296
38.9	Head of shoals, water surface	1,304
39.2	Foot of bridge at old gold stamp mill, water surface	1,305
39.5	Nail in red-oak tree, on left bank, 10 feet below Garnetts bridge	1,318.35
39.5	Water surface	1,309
	Bottom of old dam, Garnetts dam, water surface	1,317
39.7	Top of old dam, Garnetts dam, water surface	1,321
40.4	Nail in root of spruce pine at mouth of small creek, opposite center of shoals	1,335.59
	Foot of shoals, water surface	1,328
40.8	Head of shoals, water surface	1,346
41.3	Nail in root of hickory, 60 feet below foot of shoals, left bank	1,364.25
41.3	Foot of shoals, water surface	1,353
41.7	Head of shoals, water surface	1,377
	Nail in root of large white-oak tree, left bank, opposite shoals	1,388.79
42.3	Foot of shoals, water surface	1,378
42.5	Head of shoals, water surface	1,384
	Foot of Crooked Shoals, water surface	1,386
42.8	Head of Crooked Shoals, water surface	1,390
43.0	Nail in root of red-oak tree, right bank, in sharp bend of river	1,404.53
43.0	Water surface	1,394
43.5	Foot of shoals	1,399
43.7	Nail in root of red oak tree, on right bank, opposite shoals	1,425.41
43.7	Water surface	1,405
43.9	Foot of large shoals, water surface	1,406
44.0	Head of large shoals, water surface	1,415
44.7	Nail in root of red-oak tree, on right bank	1,437.94
44.7	Water surface	1,416
45.0	Foot of shoals, water surface	1,422
45.2	Head of shoals, water surface	1,428
	Foot of shoals, water surface	1,438
46.1	Head of shoals, water surface	1,443
46.7	Foot of shoals, water surface	1,444
46.7	Head of shoals, water surface	1,446
46.7	Nail in root of maple tree, west side of the river	1,447.54
46.4	Water surface	1,449
47.7	Nail in root of walnut tree, near west end of bridge	1,461.37
47.7	Water surface	1,454
47.7	Willow, Ga., 2½ miles north, bronze tablet cemented in rock, on west side of river at fork of road, marked "1529 ATLANTA"	1,528.619

SURVEY OF FLINT RIVER.

In May, 1900, a survey was made of Flint River from the Geological Survey gaging station, about 3 miles east of Woodbury, Ga., on the Macon and Birmingham Railroad birdge over the river, to the line of the Creek Agency Reserve near Roberta and Knoxville, a distance of 45.4 miles downstream. The work was done by Mr. D. L. Wardroper, under the supervision of R. M. Hall, resident

hydrographer. In this 45 miles the river cuts through Pine Mountain, the western coast range of the State, and descends with a total fall of 334 feet. The elevations are all above sea level, being taken from the track of the Atlanta and Columbus line of the Southern Railway, in front of the station at Woodbury, which is 780 feet above sea level. From this the zero of the Woodbury River gage was found to be 659.63 feet above sea level.

Elevations on Flint River from Woodbury to line of Creek Agency Reserve near Roberta.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Zero of gage at Woodbury Station, water surface	659.63
.0	Woodbury gaging station, water surface	661.0
.0	Bench mark No. 1, top of northwest corner of bearing stone under south truss at west end of M. and B. R. R. bridge	681.1
.6	One-fourth mile below mouth of Cane Creek, water surface	660.0
2.3	Two hundred feet above Meltons upper ford, water surface	641.8
2.5	Nine hundred feet below Meltons upper ford, water surface	637.2
5.0	Bench mark No. 2, nail in leaning catalpa tree at Miltons boat landing on right bank of river	638.8
5.2	Five thousand feet below Brown Creek, water surface	633.9
7.1	Mouth of Pigeon Creek, water surface	620.8
7.1	Bench mark No. 3, nail in pine tree on left bank, 200 feet below mouth of Pigeon Creek	628.5
9.1	Six hundred feet above Passleys ford, water surface	596.6
9.8	Twelve hundred feet below Passleys Creek, water surface	586.9
12.1	Bench mark No. 4, nail in pine tree on left bank, 100 feet below mouth of Valley Creek	566.5
12.1	Mouth of Valley Creek, water surface	562.2
13.2	Double-bridge ford 800 feet above Womble Creek, water surface	552.8
15.5	End of line between districts Nos. 1 and 23, water surface	522.0
15.5	Bench mark No. 5, white oak on top of slope on left bank, 100 feet below field, opposite line between districts Nos. 1 and 3	531.8
15.8	Bench mark No. 6, sweet-gum tree in field 50 feet below Talbotton and Thomaston road, about 150 feet from river	516.7
17.3	Eight hundred feet below mouth of Earls Creek, water surface	512.0
17.6	Talbotton and Thomaston road, water surface	507.3
18.5	Top of yellow Jacket Shoals, 450 feet below Tablotton and Thomaston road, water surface	499.6
20.3	Nine hundred feet above mouth of Lazer Creek, water surface	427.0
23.4	Water surface	416.6
23.5	Water surface	411.9
24.6	Bench mark No. 7, top of west end of wooden cap on north masonry abutment of wagon bridge at Flat Shoals road	431.6
25.0	Twenty-three hundred feet below new bridge at Flat Shoals road, water surface	409.3
26.3	Twenty-nine hundred feet above mouth of Big Potato Creek, water surface	402.5
26.8	Bench mark No. 8, nail in water oak on right bank of Big Potato Creek, 200 feet above mouth	413.6
26.9	Bench mark No. 9, nail in root of sweet-gum tree south of road at Parkers Ferry	417.7
27.5	Thirty-five hundred feet below mouth of Big Potato Creek, water surface	400.5
27.6	Thirty-nine hundred feet below mouth of Big Potato Creek, water surface	398.9
28.7	One hundred feet below Hatchasofkee Creek, water surface	396.6
30.0	Nineteen hundred feet above Elliotts Ferry, water surface	374.0
32.3	Six hundred feet above Walkers Ferry, water surface	359.4
37.5	Eight hundred and eighty feet below Ducks Creek, water surface	349.3
	Bench mark No. 10 nail in leaning ash tree on right bank of Swift Creek, 3,000 feet from its mouth, 100 feet from north end of bridge	377.1
	Bench mark No. 11 nail in root of beech tree at south end of bridge mentioned in description of bench mark No. 10	379.7
41.1	Fifty-five hundred feet above Grays Ferry, water surface	345.9
42.4	Bench mark No. 12, nail in root of sweet gum opposite boat landing at Grays Ferry, left bank	353.1
43.9	Twenty-nine hundred feet below mouth of Auchumkee Creek, water surface	339.7
44.0	Water surface	335.2
44.7	Water surface	334.9
45.0	Eighty-nine hundred feet below mouth of Auchumkee Creek, water surface	328.8
45.5	Water surface	327.0
46.9	Bench mark No. 13, tin cap on root of red oak 20 feet west of north of the north-south line on west boundary of lot No. 176, fourteenth district, of Taylor County	352.9

WATER POWER IN APALACHICOLA RIVER DRAINAGE BASIN.

CHATTAHOOCHEE RIVER.

In the foregoing lists of water-surface elevations several surveys have been put together, so as to give a continuous chain of elevations, and, for the main river, the distance of each point noted is given in miles above Columbus. Objects along the river are also noted and serve to locate and make it possible to identify each point at which the surface elevation is given.

The fall at any point or between any points can therefore be determined, and the amount of water flowing at it can be estimated from the records of the hydrographic stations at West Point, Oakdale, Norcross, Buford, and Gainesville, and from miscellaneous measurements.

At Columbus is the fall line, and immediately above are located the largest falls on the river. Here a large amount of water power has been in use for many years.

The developed water powers are: (1) Eagle and Phœnix dam, operating the Eagle and Phœnix, and Muscogee mills; fall 26 feet. (2) City Mills dam; fall 9 feet. (3) Columbus Power Company's dam and tailrace; fall 40 feet. The last mentioned was completed in 1902. The stone dam is located above the foot of the shoals, a considerable portion of the head being obtained by excavating for the tail-water. Water is backed three-fourths mile above the dam, and reaches the foot of a very fine shoal, the Chattahoochee Falls Company's property, where there is a fall of 40 feet in little more than 1 mile. The old Clapp factory was located on this property and the power was supplied by a wing dam, about half of the fall being used. The present owners of the property have secured water rights along the river above, which will enable them to develop a much higher head and will also give a larger storage. The fall from the upper line of the original property to foot of shoals on Ogletree's land is 21 feet in 7 miles. From this point up to the lower end of Hargetts Island, 10 miles above, the fall is 150 feet.

Along this portion of the river the banks are high and rocky. The river is mostly wide and full of islands, but at several places the

banks come close together, affording excellent sites for high dams, in some cases not more than 600 feet long.

In the 7 miles from Hargetts Island to the foot of Riverview dam the fall is 42 feet. At the Riverview mills and Langdale mills there are developed powers, each using 10 or 12 feet of fall.

Above the Langdale mills up to West Point the amount of fall is small. Between West Point and Franklin the fall is 75 feet in 38 miles, averaging about 2 feet a mile. The fall is not uniformly distributed, however, and it is probable that some really good power developments could be made.

At Franklin, where there is an excellent site for a dam, extensive surveys have been made for one 32 feet high, which would back water 8½ miles, to the head of Fishtrap Shoals. This proposed development includes Bushyhead Shoals and several others not so large.

From here to the foot of McIntosh Shoals the fall is only 11 feet in 11 miles. At McIntosh Shoals there is a fall of 8 feet in one-half mile.

Above this shoal up to the mouth of Peachtree Creek, above Atlanta, the fall is 66 feet in 47 miles. Three miles above is the dam site of a proposed development of 32 feet, for which complete surveys have been made.

At Bull Sluice, 4 miles below Roswell, is the new electric power plant of the Atlanta Water Power and Electric Company. The dam is a massive concrete structure, 48 feet high, which with the 2-foot flashboards, gives a head of 50 feet. This plant is fully equipped with the most modern type of water wheels and electric generators. The combined capacity of the water wheels is greatly in excess of the normal low-water flow of the river, thus providing for a large increase of power from stored water, and at times when the flow of the river is increased. The power is all transmitted electrically to Atlanta. Backwater from this dam, when flashboards are used, reaches a point just under the wagon bridge at Roswell.

In the 26 miles above Roswell, reaching to Bowmans Island, near Buford, there is a fall of about 57 feet, the drop being as much as 5 or 6 feet to the mile in a few places. At Bowmans Island is a proposed site for a 50-foot dam to back water 14 miles up to mouth of Chestatee River.

From the mouth of Chestatee River, up to the mouth of Little River, there are a number of small shoals aggregating 28 feet of fall. Beginning a short distance above Little River is a series of shoals, which has recently been developed by the North Georgia Electric Company. The dam of this plant is located a quarter of a mile above the foot of the shoals, leaving about 7 feet of the fall undeveloped. It is a log crib structure entirely filled with rock and is 36 feet high. The power is transmitted electrically from the plant. Backwater extends 8 miles, to above Clarks Bridge. In the next 11 miles, up to Belton, the fall is about 30 feet and includes several shoals and some good sites for dams.

In the next 9 miles, extending to mouth of Soque River, the fall is 81 feet, including Harrisons Shoals, Perkins Shoals, and a series of shoals above and below Duncans Bridge, the latter series having a fall of 20 feet in 1¼ miles.

Above the mouth of the Soque River is a series of shoals, with a total fall of 106 feet in 4¼ miles. Along this part of the river the banks are steep and rocky, and there are numerous good dam sites.

WATER POWERS ON SOQUE RIVER.

In 5½ miles above the mouth of the river the fall is 30 feet, including several small shoals. One mile downstream from Porter Mills there is an undeveloped fall of 6 feet in about 50 yards, with 7 feet of fall above, to the foot of Porter Shoals. At Porter Mills is the Porter Shoals, an almost vertical drop of 48 feet and by far the best waterfall on the river. This is partly developed by a small wing dam, the power being used to operate Porter's woolen and cotton factory, 4 miles from Demorest, the nearest railroad point.

About 500 feet upstream is Porters Upper Shoal, with a 15-foot fall, also partly developed by a small dam, and supplying power for factory No. 2 of the same company. A much greater head could be obtained here by increasing the height of the dam. One and one-half miles above Porter Mills is a good water-power site, known as the Old Factory Shoals, where there is a fall of 23 feet in a distance of 600 feet. This was utilized at one time, but all signs of the dam have vanished.

WATER POWERS ON CHESTATEE RIVER.

From the mouth of the river up to the foot of the North Georgia Electric Company's dam, at Newbridge, a distance of 17½ miles, the fall is 83 feet. This includes three small dams and a number of undeveloped shoals, but no especially favorable sites for large powers.

The North Georgia Electric Company's dam is 27 feet high, and is made of log cribs filled with rock, and backs water about 3¼ miles. Above this dam there is a large amount of fall and many good power sites, some of which are developed and used to operate machinery connected with gold mining. Most of the undeveloped powers are owned or controlled by various mining companies.

WATER POWERS ON FLINT RIVER.

The country rock in the Flint River basin over the range of the preceding elevations is vitrified sandstone or quartzite, forming fine bluffs and occasional narrow gorges suitable for dam sites. It is easily quarried, and comes out in square blocks that are excellent for building dams.

The first shoals, known as the Dripping Rock Shoals, begin near the mouth of Cane Creek, about 3,000 feet below the bridge, and fall 23.7 feet in about 2 miles. In the next 2 miles, or to a point about 1 mile below the mouth of Pigeon Creek, the river falls only 6 feet. Then shoals begin which have a practically uniform fall of 10.5 feet per mile for a distance of 8½ miles, or to Double Bridges (Gibson's old ferry), the total fall in that distance being 90 feet. From that point to the north boundary of the twenty-third land district the fall is 20 feet in a distance of 4,700 feet. In the next 3 miles, or to the head of the Yellow Jacket Shoals, there is a total fall of 22 feet.

The Yellow Jacket Shoals are the finest on the river. They are below Pigeon Creek and above Lazer Creek (sometimes called Eliza Creek), near Rowland, in Upson County, about midway between Talbotton and Thomaston, in the heart of the cotton belt of Georgia. They have a fall of 65 feet in a distance of 7,900 feet, or 1½ miles, all of which can be utilized. In fact a much larger head would be available by building a 42-foot dam at the head of the Yellow Jacket Shoals and taking the water in a canal to a point opposite the foot

of the shoals. This would cover a fall of 107 feet, 7 feet of which would be sufficient for storage and canal grades, leaving a net working head of 100 feet. A dam of this height would back the water about 4 miles. There would be no trouble from flood water on the wheels, for the river is very precipitous below the foot of the Yellow Jacket Shoals, having an average fall of 6 feet to the mile in the next 10 miles, the most precipitous part being a fall of about 25 feet between Hatchasofkee Creek and Elliotts Ferry, a distance of about 2 miles. Elliotts Ferry is between the mouths of Mountain Creek and Deep Gulch Creek.

Below Elliotts Ferry the river falls 13 feet in the next 2 miles, or to Walker's Ferry, and then assumes a practically uniform grade of 1.7 feet to the mile for the next 11 miles, or to a point one-half mile below the mouth of Auchumkee Creek, in Crawford County, which is at the head of small shoals having a fall of 10 feet in a distance of 1 mile. This is practically the point where the river crosses the fall line and enters the younger geologic formations. The survey ended here.

Along the portion of the river surveyed there are several large tributaries which have fine shoals. The most notable of these is Big Potato Creek, near Thomaston, in Upson County, which has three shoals near its mouth, surveyed in 1891 by C. C. Anderson, assistant State Geologist, and reported by him to be as follows: Rogers Shoals, 81 feet fall in a distance of 3,500 feet; Nelson Shoals, 115 feet fall in a distance of 2,700 feet, and Daniels Shoals, 13 feet fall in a distance of 150 feet.

About 10 miles above Woodbury there is a fine water power on Flint River, 1 mile from Neal, on the Southern Railway. It is known as the Flat Shoals and has a fall of 32 feet in a distance of 3,000 feet. There is a natural storage basin just above these shoals, where it is estimated that a 2-foot dam would store the low-water flow of the river for twelve hours, and that a 4-foot dam would store it for thirty-eight hours. This power is not included in the survey described, but was surveyed separately by B. M. Hall. It can be developed by a canal 3,000 feet long, or by a dam at the foot of the shoals, where there is a narrow shut-in.

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MOBILE RIVER DRAINAGE BASIN

DESCRIPTION OF BASIN.

The drainage basin of the Mobile River is the largest in Georgia and Alabama, and is designated the Mobile basin because its waters all enter the Gulf through Mobile River at Mobile, Ala. At its headwaters, Cartecay and Ellijay rivers unite at Ellijay to form Coosawattee River, which, just above Resaca, unites with the Conasauga to form Oostanaula River. At Rome, Ga., the Oostanaula and the Etowah unite to form Coosa River. Six miles above Montgomery, Ala., the Coosa and the Tallapoosa unite to form Alabama River, and not far from the coast the Tombigbee unites with the Alabama to form Mobile River, which flows into Mobile Bay, an arm of the Gulf of Mexico.

Cahaba River is the principal tributary of the Alabama and joins it about 10 miles below Selma. Hillabee Creek flows into Tallapoosa River just above Sturdevant and near Alexander. Talladega Creek is a tributary of the Coosa.

Tombigbee River rises in the northeastern part of Mississippi and enters Alabama in Pickens County. Its principal tributary is the Black Warrior, which is formed by the junction of Mulberry Fork and Sipsey Fork. Locust Fork enters the Black Warrior some distance below the junction.

This paper discusses only the gaging stations in the Mobile drainage basin which are located in the State of Georgia. For stations located in Alabama and Mississippi the reader is referred to Water-Supply Paper No. 107, Water Powers of Alabama and Mississippi, and to the Reports of Progress of Stream Measurements, published by the United States Geological Survey.

STREAM FLOW.

ETOWAH RIVER NEAR BALLGROUND.

This station was established in 1905. It is located at an iron highway bridge about 2½ miles south of Ballground, and half a mile below the mouth of Long Swamp Creek.

The channel is nearly straight for 300 feet above and 600 feet below the station, and the current is moderately swift and fairly good

for measurement. The left bank is high and will not overflow, but the right bank is low and cultivated for about 500 feet and will overflow at a gage height of about 16 feet above low water. The bed of the river is partly rock.

Discharge measurements are made from the bridge of two iron spans. The left span is 110 feet long, and spans the entire river except at floods. The other span, which is over low ground on the right bank, is 100 feet long, and there is also 90 feet of wooded trestle on the right bank. Gage heights are determined directly from the bench mark, which is the top of the upstream end of the first floor beam to the left of the middle pier; elevation, 28.00 feet above the datum of the assumed gage.

Discharge measurements of Etowah River near Ballground.

Date	Gage height	Discharge
1905	*Feet*	*Sec-ft.*
June 24	3.10	763
November 15	2.24	408

ETOWAH RIVER AT CANTON.

This station was established in 1892 by the United States Weather Bureau, and it was only in 1896 that measurements were begun by the United States Geological Survey. It is located at the wagon bridge in Canton, one-half mile above the mouth of Canton Creek and 1,000 feet upstream from the Atlanta, Knoxville and Northern Railway station.

The channel is straight for 1,000 feet above and 500 feet below the bridge. The current is affected by a fish-trap dam about 1 foot high, which has caused much trouble by being occasionally washed away and built up again. Up to gage height 3 feet the river is only 116 feet wide and flows between the piers on its lower banks. Up to about 14 feet it is confined between its upper banks, which are the abutments at the outer ends of the approaches, but above 14 feet it begins to overflow the bottom lands. The bed is fairly constant.

Discharge measurements are made from the upstream side of the iron highway bridge. The initial point for soundings is the river side of the right-bank pier at the end of the main span. The gage

is a heavy vertical timber, fastened to the edge of the left-bank pier, on the upstream side. The gage is read once each day by J. M. McAfee, who is paid by the United States Weather Bureau for six months of the year and by the Georgia Geological Survey for the other six months. Bench marks were established as follows: (1) A cut on a silver-maple tree on the east side of the road, 20 feet from the end of the bridge, on the south or left bank of the river; elevation, 20.36 feet. (2) The top of the iron bar on the top of the left-bank pier at the end of the center span of the bridge, upstream side; elevation, 23.39 feet. Elevations refer to the datum of the gage.

Discharge measurements of Etowah River at Canton.

Date	Gage height	Discharge	Date	Gage height	Discharge
1896	*Feet*	*Sec.-ft.*	1901	*Feet*	*Sec.-ft.*
April 29	0.05	590	April 25	1.50	1,684
July 7	.59	862	August 16	2.85	2,781
September 9	— .65	218	November 2	.25	686
October 28	.45	733			
October 28	2.25	2,327	1902		
November 27	— .05	449	March 29	15.10	12,069
			April 26	.90	1,198
1897			July 12	.51	779
March 17	2.60	2,656	August 16	.20	419
May 5	.75	1,264	November 22	.44	410
June 16	1.27	1,632			
August 28	— .30	449	1903		
September 21	— .60	284	January 28	1.07	922
November 12	.23	346	March 27	2.50	2,562
December 13	.83	514	April 27	1.80	1,873
			June 25	.94	1,166
1898			June 25	.93	1,119
January 13	.60	761	September 4	.51	570
March 5	.33	621	September 4	.51	575
March 19	5.60	5,124	October 10	.60	513
May 20	.60	627			
June 4	.22	495	1904		
July 19	.25	413	January 15	.50	542
August 30	.65	1,062	March 3	.78	821
September 6	3.25	3,190	May 17	.18	497
September 7	2.00	2,104	July 26	.04	328
November 18	.90	1,223	July 26	.04	324
December 10	.70	1,064	September 1	.06	374
			October 8	— .88	197
1899			October 8	— .25	227
April 27	1.92	2,087	October 13	— .88	171
June 23	.25	770			
September 27	— .19	406	1905		
November 10	— .10	420	January 21	.67	720
			January 21	.67	710
1900			January 21	.67	689
February 27	.80	1,113	April 20	.61	716
May 19	1.05	1,351	June 3	.49	786
December 1	.55	816	October 18	.14	531
			October 18	.14	531
1901			November 17	.14	434
February 5	2.85	2,578	November 17	.14	434

Daily gage height, in feet, of Etowah River at Canton.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1896												
1	0.6	1.8	0.6							0.0	0.0	1.0
2	.6	1.8	.5							— .2	— .1	1.0
3	.6	1.8	.5							— .3	— .1	.6
4	.6	1.8	.5							— .3	.0	.3
5	.6	1.8	.5							— .4	+2.8	.3
6	.6	2.0	.5							— .4	.8	.2
7	.5	3.0	.8							— .5	.6	.1
8	.7	3.0	.8							— .5	.6	.1
9	.7	3.5	.8						—0.65	— .5	.4	.1
10	.7	2.0	.8						— .6	— .2	.4	.1
11	.7	1.8	.8						— .6	— .3	.4	.1
12	.7	1.8	.8						— .65	— .4	.9	.0
13	.7	1.8	.8						— .7	— .2	3.6	.0
14	.7	1.0	.8						— .75	— .3	1.0	.0
15	.7	1.0	.7						— .6	— .4	.7	.2
16	.7	1.0	.8						— .55	— .4	.7	.4
17	1.0	1.0	.8						— .65	— .4	.4	.2
18	.8	1.0	.7						— .75	— .4	.2	.0
19	.8	1.0	1.0						— .75	— .4	.0	.0
20	.8	1.0	1.0						— .75	— .5	.0	.0

Daily gage height, in feet, of Etowah River at Canton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1896												
21	0.8	1.0	1.0	.....	.....	.....	.....	.....	—0.75	—0.5	0.0	0.0
22	1.0	.8	.8	.....	.....	.....	.....	.....	— .6	— .5	.0	.0
23	3.8	.8	.8	.....	.....	.....	.....	.....	— .1	— .5	.0	.0
24	5.8	.8	.8	.....	.....	.....	.....	.....	— .3	— .0	.0	.0
25	3.0	.8	.6	.....	.....	.....	.....	.....	— .4	— .1	.0	.0
26	2.0	.6	.6	.....	.....	.....	.....	.....	— .6	— .1	.0	.0
27	2.0	.6	.6	.....	.....	.....	.....	.....	— .6	— .1	.0	.0
28	2.0	.6	.6	.....	.....	.....	.....	.....	— .6	+2.25	.0	— .1
29	1.8	.6	.6	.....	.....	.....	.....	.....	— .6	1.1	.0	— .1
30	1.8	.....	.6	.....	.....	.....	.....	.....	+ .7	1.0	1.0	— .1
31	1.8	.....	a1.0	.....	.....	.....	.....	.....	.....	.0	1.4	— .1
1897												
1	— .1	.6	.8	1.6	2.0	.1	.0	.2	.8	— .7	.2	.6
2	— .1	2.2	.6	2.0	1.8	.1	.0	.0	.0	— .7	.8	.6
3	— .1	1.0	.6	2.0	1.8	.7	.0	.0	— .3	— .7	.8	.6
4	— .1	.8	.6	2.6	1.6	.5	.0	.0	— .4	— .5	.6	.6
5	— .1	.8	.6	11.2	.7	.5	.0	.0	— .4	— .4	.5	2.0
6	— .1	.9	3.6	5.0	.7	.5	.0	.6	— .5	— .3	.5	1.0
7	— .1	.8	4.0	3.0	.7	.4	.4	.8	— .5	— .3	.3	.9
8	— .1	.8	2.0	2.0	.6	.4	.4	.8	— .5	— .4	.3	.8
9	— .1	.8	1.8	3.0	.6	.3	.4	.6	— .6	— .4	.3	.8
10	— .1	.8	1.8	2.6	.5	.3	.3	.6	— .6	— .4	.2	.8
11	— .1	.8	1.8	2.4	.5	.2	.3	.6	— .6	+1.2	.2	.8
12	— .1	.8	2.8	2.2	.5	.1	.2	.4	— .6	1.0	.2	.6
13	— .1	1.8	7.2	2.0	.5	.1	.2	.4	— .6	.8	.2	.8
14	2.2	1.0	6.8	2.0	.4	.1	.2	.2	— .6	.8	.2	.9
15	1.8	.8	4.0	2.0	.4	.0	.1	.2	— .6	.6	.2	.9
16	.9	.8	3.6	1.8	.4	3.0	.1	.2	— .6	.6	.2	.8
17	.5	.7	2.6	1.8	.4	1.0	.9	1.0	— .6	.6	.2	.7
18	2.0	.6	2.4	1.4	.4	.8	.9	1.0	— .6	.4	.2	.7
19	1.6	.6	2.0	1.4	.4	.6	1.0	.8	— .6	.4	.1	.8
20	3.6	.6	2.8	1.2	.4	.4	2.0	.6	— .6	.6	.1	.8
21	3.0	.8	2.0	1.2	.3	.4	7.1	.4	— .6	.4	.2	.9
22	2.0	.8	1.0	1.0	.3	.3	2.5	.2	— .6	.4	.2	1.0
23	1.0	1.6	1.8	1.0	.2	.3	1.0	.0	— .5	.4	.2	.9
24	.8	1.0	1.8	1.0	.1	.3	.8	.0	— .5	.4	.2	.8
25	.7	1.0	1.6	1.0	.1	.3	.8	.0	— .5	.4	.8	.8
26	.7	.8	1.6	.8	.1	.2	.6	— .1	— .8	.4	.6	.8
27	.7	.8	1.4	.8	.1	.1	.6	— .2	— .6	.3	.6	.7
28	.6	.8	1.2	.8	.1	.1	.5	— .3	— .5	.3	.6	.6
29	.6	.....	1.2	1.0	.1	.1	.5	— .4	— .6	.3	.8	.6
30	.6	.....	1.2	1.0	.1	.1	.4	— .4	— .6	.3	.6	.6
31	.6	.....	1.2	.....	.1	.....	.2	+1.0	.....	.2	.....	.5
1898												
1	.5	.8	.3	1.6	.6	.6	.3	.4	.4	.4	.8	1.6
2	.5	.8	.3	1.4	.6	.4	.2	.4	11.5	.4	.8	1.6
3	.3	.8	.6	1.2	.6	.3	.2	2.0	9.0	.3	.7	1.6
4	.3	.7	.6	1.0	.5	.2	.2	3.4	4.0	9.0	.7	2.0
5	.2	.6	.4	2.0	.5	.2	.4	3.0	2.0	13.5	.7	2.4
6	.2	.6	.4	3.6	.4	.2	.4	2.0	3.0	4.0	.8	2.4
7	.3	.6	.4	3.0	.4	.2	.8	3.0	2.4	2.4	.7	2.2
8	.3	.6	.3	1.8	.4	.2	1.8	3.0	1.6	2.0	.6	2.2
9	.3	.5	.2	1.0	.4	.2	.8	2.0	1.4	1.6	.6	2.1
10	.4	.5	.2	.8	.4	.1	.8	4.0	1.4	1.4	.7	2.0
11	.6	.4	.2	.8	.3	.1	.9	6.0	1.6	1.2	.8	2.0
12	.8	.4	.2	.6	.3	.1	2.9	4.0	1.4	1.2	.7	1.8
13	.8	.4	.2	.6	.3	.1	2.0	3.5	1.4	1.1	.7	1.8
14	.6	.4	.1	.6	.3	.7	1.8	2.0	1.0	1.1	.6	1.8
15	.6	.4	.4	.5	.3	.6	1.6	1.8	1.0	1.0	.8	1.7
16	.8	.4	4.0	.5	.3	.6	1.4	1.6	1.0	1.0	.8	1.7
17	.8	.4	3.0	.4	.3	.5	1.2	1.4	.8	1.0	.8	1.7
18	.8	.3	.8	.4	.2	.5	.6	1.2	.8	4.2	.9	1.6
19	.9	.3	.6	.8	.2	.4	.2	1.0	.6	3.0	1.0	1.6
20	.9	.4	.6	.6	.2	.4	.2	.8	.6	2.0	1.2	1.6

a Weather Bureau discontinued observations March 31, 1896; Geological Survey began observations September 9, 1896.

Daily gage height, in feet, of Etowah River at Canton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1898												
21	.8	0.5	0.4	0.7	0.2	0.4	0.2	0.6	0.4	2.0	1.2	1.6
22	.8	.4	.4	.6	.2	.4	.3	.4	.4	2.0	1.6	1.5
23	.9	.4	.4	.8	.8	.3	.3	.4	.4	1.8	2.0	1.4
24	.9	.4	.3	2.0	.8	.3	7.3	.4	.8	1.6	1.8	1.4
25	2.0	.3	.2	.9	.6	.3	2.0	.4	.6	1.4	1.6	1.4
26	5.6	.3	.2	.8	.6	.3	2.0	.4	.6	1.2	1.6	1.4
27	4.0	.3	.1	.8	.5	.3	1.8	3.6	.4	1.0	1.5	1.4
28	2.6	.3	.2	.8	.4	.3	1.8	2.4	.4	1.0	1.5	1.4
29	1.3	.....	5.0	.6	.4	.3	1.8	1.8	.4	.9	2.0	1.2
30	1.0	.....	4.0	.6	.4	.3	1.8	1.0	.4	.8	1.8	1.2
31	.9	.....	3.0	.....	.8	.....	1.8	.6	.....	.8	.....	*1.8
1899												
1	1.8	1.6	3.0	2.4	1.6	1.0	1.4	1.4	.8	— .4	— .1	.1
2	1.8	1.6	2.8	2.2	1.5	1.4	1.4	1.4	.6	— .4	— .1	.4
3	1.8	1.8	2.8	2.0	1.4	1.4	1.4	1.8	.6	— .5	— .1	.4
4	1.8	2.8	2.6	3.8	1.4	4.4	1.2	1.6	.6	— .5	— .1	.4
5	1.8	3.0	2.4	3.0	1.4	3.0	1.2	1.6	.6	— .5	— .1	.2
6	1.8	6.2	2.0	2.8	1.4	1.0	1.0	1.4	.6	.0	— .1	.2
7	1.6	3.0	1.8	2.8	1.4	1.0	1.4	1.2	.5	.2	— .1	.2
8	1.4	4.0	1.8	4.0	1.4	1.0	1.6	1.6	.5	.2	— .1	.2
9	1.4	3.2	1.6	3.0	1.6	1.0	4.0	1.8	.4	.2	— .1	.2
10	1.4	3.0	1.5	2.8	1.6	1.0	2.0	1.6	.4	.1	— .1	.2
11	1.4	2.0	1.5	2.0	1.4	1.4	1.8	1.6	.4	.1	— .1	.3
12	1.8	(a)	1.4	1.8	1.4	1.6	1.6	1.6	.4	.1	— .1	2.8
13	1.8	(a)	1.4	1.8	1.4	1.6	1.4	1.4	.4	.0	— .1	.3
14	2.8	(a)	3.6	1.8	1.8	1.4	1.4	1.2	.4	.0	— .1	.3
15	2.6	3.0	7.0	1.8	1.8	1.4	1.8	1.2	.4	.0	.0	.2
16	2.4	2.0	18.2	1.6	1.8	1.4	1.9	1.0	.4	.0	.0	.2
17	2.3	2.0	18.0	1.6	1.6	1.4	1.8	1.0	.3	.0	.1	.2
18	2.3	2.0	4.0	1.6	1.6	1.4	1.8	.8	.3	.0	.0	.1
19	2.2	2.0	4.0	1.4	1.6	1.4	1.8	.8	.3	.0	.0	.1
20	2.2	1.8	3.0	1.4	1.4	1.3	1.6	1.4	.2	— .1	.0	.1
21	2.0	1.8	2.0	1.4	1.4	1.3	1.6	1.4	.1	— .1	.0	.1
22	1.8	1.8	2.0	1.4	1.4	1.3	1.6	1.2	0	— .1	.0	.1
23	1.8	1.8	2.0	1.4	1.4	1.2	1.6	1.0	.0	— .1	.9	.8
24	2.0	1.6	1.8	1.8	1.4	1.2	1.4	1.0	.0	— .1	.7	3.0
25	2.8	1.4	1.8	4.8	1.4	1.2	1.2	.8	— 1	— .1	.7	3.0
26	2.0	1.8	2.8	3.0	1.2	1.0	1.2	.8	— .1	— .1	1.1	2.0
27	1.8	10.0	2.0	2.8	1.2	1.0	1.2	1.4	— .1	.0	.7	2.8
28	1.8	5.0	1.8	2.0	1.2	1.0	1.2	1.2	— .2	.0	.5	1.8
29	1.8	.....	2.8	1.8	1.2	1.0	1.2	1.0	— .3	— .1	.1	.6
30	10.0	.....	2.0	.....	1.2	1.0	1.1	1.0	— .3	— .1	.1	.6
31	5.0	.....	2.6	.....	1.0	.....	1.0	.8	.....	— .1	.....	.6
1900												
1	.6	.6	.8	1.4	1.2	1.4	1.7	1.0	.6	.3	1.3	.6
2	.6	.8	.8	1.0	1.2	1.4	1.7	1.0	.6	.2	1.4	.6
3	.6	1.0	.8	.8	1.2	2.4	1.8	1.0	.6	.2	1.6	.5
4	.6	1.0	.8	.8	1.2	2.0	1.8	1.0	.6	1.6	1.6	2.8
5	.6	1.2	.8	.8	1.1	3.0	1.8	1.0	.6	1.5	1.4	2.6
6	.6	1.2	.8	.8	1.1	3.0	2.4	.8	.6	1.3	1.4	1.3
7	.6	1.2	.8	.8	1.1	6.0	2.2	.8	.6	1.3	1.4	1.0
8	.6	2.7	3.4	.8	1.1	6.0	1.8	.8	.6	2.2	1.4	.8
9	.6	2.5	5.4	.8	1.1	4.0	1.3	.8	.6	3.1	1.4	.8
10	.6	1.8	2.2	.8	1.0	.....	1.2	.6	.6	2.0	1.4	.7
11	.6	2.7	1.6	.8	1.0	.....	1.0	.6	.6	2.0	1.4	.6
12	1.6	14.2	1.0	2.3	1.0	.....	1.0	.6	.6	2.0	1.4	.6
13	1.0	6.0	.9	2.6	1.0	.....	1.0	.6	.6	2.6	1.4	.5
14	.6	3.1	.8	2.2	1.0	.....	3.0	.6	.6	2.3	1.4	.4
15	.6	2.0	.8	2.0	.9	.....	1.8	.6	3.6	2.0	1.2	.4
16	.4	1.5	.9	1.8	.9	.....	1.2	.8	5.0	1.5	1.2	.4
17	.4	1.5	.9	1.8	.9	.....	1.2	1.7	3.1	1.4	1.2	.4
18	.4	1.0	.9	2.3	.9	.....	1.2	2.3	2.3	1.3	1.2	.3
19	1.0	1.0	.9	3.6	1.2	.....	1.0	2.3	1.6	1.0	1.4	.3
20	1.0	1.0	5.2	2.0	1.1	.....	1.0	2.0	1.4	1.0	2.1	2.3

a Gage covered with ice February 12 to 14, 1899.

FLAT SHOALS ON THE FLINT RIVER, BETWEEN PIKE AND MERIWETHER COUNTIES, GEORGIA.

Daily gage height, in feet, of Etowah River at Canton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900												
21	.4	1.0	3.6	5.0	1.0	.....	1.0	1.0	.8	1.0	4.6	2.1
22	.4	1.0	1.8	3.0	1.0	.....	1.0	1.0	.7	1.0	3.7	1.8
23	.4	1.0	1.8	2.0	1.0	.....	1.0	1.0	.6	2.6	3.0	1.0
24	.4	1.0	2.8	4.0	1.8	.....	1.0	3.0	.6	7.2	2.1	1.0
25	.4	1.0	2.1	2.0	1.4	.....	1.0	2.0	.6	3.5	2.0	1.0
26	.4	1.0	3.6	1.8	1.2	.....	1.0	1.0	.6	2.7	4.0	.8
27	.4	.8	2.0	1.6	1.2	.....	1.5	.6	.6	2.5	2.2	.8
28	.4	.8	2.0	1.0	1.0	.....	2.8	.6	.4	2.0	2.0	.7
29	.4	.....	2.0	1.0	1.0	.....	3.5	.6	.4	1.8	1.0	.7
30	.4	.....	1.9	1.4	1.0	.....	4.0	.6	.3	1.4	.7	.7
31	.6	.....	1.9	.....	1.0	.....	2.0	.6	.....	1.3	.....	2.8
1901												
1	2.1	1.2	.8	1.8	1.0	4.6	1.7	.6	2.4	.7	.5	.6
2	1.8	1.0	.8	3.6	.9	2.4	1.2	.6	2.3	.8	.5	.8
3	1.3	1.3	.7	4.8	.9	2.0	1.0	.5	2.2	2.9	.5	.8
4	.9	6.0	.7	3.4	.8	3.6	.8	.5	2.0	2.8	.5	.9
5	.7	4.1	.7	2.5	.8	3.0	.7	.5	1.8	2.0	.6	.9
6	.7	2.0	.6	2.3	.8	2.8	.7	.4	1.7	1.0	.6	.9
7	.7	2.0	.6	2.0	.9	3.4	2.6	1.1	1.5	.9	.6	.9
8	.6	1.8	.6	1.9	.9	1.3	1.8	.7	1.3	.8	.6	.9
9	.6	4.0	.6	1.3	.9	1.2	1.0	.6	1.1	.6	.6	.9
10	.6	3.1	.8	1.0	.9	1.2	.9	.5	1.0	.6	.6	1.2
11	6.4	3.0	.9	.9	.9	1.0	.8	.8	.9	.6	.7	1.1
12	14.0	2.6	.8	.8	.9	.8	.7	1.9	.9	.6	.7	1.1
13	4.5	2.3	.9	1.7	.8	1.4	.7	1.4	.8	.6	.7	1.1
14	2.1	2.1	.9	3.0	.8	2.35	.6	1.2	.8	.5	.7	1.2
15	1.8	1.8	.9	2.5	.9	5.3	.6	1.5	.7	.5	.7	4.0
16	1.4	1.8	.8	2.0	.9	4.65	.6	2.5	.7	.5	.6	3.4
17	1.1	1.8	.8	1.7	.8	3.2	.8	3.2	1.5	.5	.6	3.0
18	1.0	1.8	.7	1.3	.8	3.1	1.7	2.8	2.8	.4	.6	2.0
19	1.0	1.8	.7	4.0	.8	2.8	1.9	5.0	1.4	.4	.7	1.7
20	1.0	1.6	.7	4.2	2.7	1.7	1.6	3.2	1.0	.4	.7	1.5
21	.8	1.5	.6	3.8	12.2	1.5	1.1	5.2	.9	.3	.7	1.3
22	.8	1.3	.6	2.6	16.6	1.3	1.0	7.0	.8	.3	.7	1.2
23	.7	1.2	.6	2.4	5.7	1.2	.8	13.0	.7	.3	.8	1.2
24	.9	1.0	.8	1.8	3.1	1.1	.7	3.2	.7	.2	1.0	1.1
25	.9	.9	.8	1.6	2.8	1.0	.6	2.5	.6	.2	1.0	1.2
26	.9	.9	17.0	1.5	2.4	.9	.5	2.3	.6	.2	.9	1.2
27	1.0	.8	6.8	1.4	2.0	3.6	.9	2.1	.6	.2	.8	2.4
28	1.3	.8	3.4	1.3	1.8	3.9	.8	3.9	.7	.2	.7	3.6
29	1.2	.....	3.0	1.2	1.6	2.3	.7	2.7	.8	.2	.7	20.0
30	1.0	.....	2.0	1.1	1.4	2.1	.7	2.5	.7	.1	.7	17.0
31	1.3	.....	1.8	.....	2.4	.....	.7	2.4	.....	.1	.....	4.0
1902												
1	3.7	5.6	10.8	2.8	.5	.4	.4	.5	.8	2.8	.6	2.7
2	3.3	11.8	4.3	2.4	1.0	.6	.4	.5	.8	1.8	.5	4.0
3	3.0	5.4	3.1	2.1	1.1	.6	.3	.5	1.2	.8	.5	4.2
4	2.9	3.1	3.0	1.8	1.0	.3	.4	.5	1.2	.8	.5	2.1
5	2.8	2.7	2.8	1.6	.9	.3	.4	.4	1.4	.8	.5	2.8
6	2.5	2.3	2.8	1.5	.8	.3	.4	.4	1.4	.6	.8	1.8
7	2.2	2.2	2.5	1.4	.7	.3	.4	.4	1.0	.6	.7	1.2
8	2.0	2.1	2.1	1.4	.7	1.3	.4	.4	1.0	.6	.7	1.1
9	1.9	2.0	1.9	1.3	.6	2.0	.4	.4	1.0	.8	.6	1.1
10	1.7	1.8	1.8	1.3	.5	1.8	.4	1.0	1.0	.8	.7	1.0
11	1.6	1.6	1.7	1.3	.6	1.0	.3	1.0	1.0	.7	.7	.9
12	1.6	1.5	1.7	1.2	.5	1.0	.4	1.2	.8	.7	.8	.9
13	1.5	1.3	1.6	1.1	.6	1.0	.3	1.0	.8	.7	.8	.8
14	1.5	1.2	1.5	1.0	.6	1.0	.3	.8	.8	.7	.8	.8
15	1.4	1.2	1.4	1.0	.5	1.0	.4	.8	.8	.5	.8	.8
16	1.4	1.1	1.8	1.0	.5	1.0	.4	.2	1.8	.5	.9	1.7
17	1.4	1.0	3.1	1.0	.5	2.4	.4	.8	1.0	.5	.9	1.6
18	1.4	1.2	2.4	2.4	.5	2.0	.6	.8	1.0	.7	.9	1.6
19	1.5	1.2	1.7	1.7	.4	1.0	.6	.6	1.0	.9	1.0	1.5
20	1.7	1.0	1.6	1.3	.5	1.0	.7	.6	.8	.9	.9	1.5

Daily gage height, in feet, of Etowah River at Canton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1902												
21	1.7	0.9	1.6	1.0	0.5	1.0	0.6	0.6	0.8	0.8	0.8	1.5
22	1.7	.7	1.5	.8	.4	.8	.6	.6	.8	.8	.4	1.5
23	1.6	.7	1.5	.7	.4	.8	.5	.6	.6	.8	.7	1.5
24	1.9	.6	1.5	.7	.4	.6	.8	.6	3.0	.8	.6	1.4
25	2.0	.5	1.5	.6	.4	.5	.8	.6	1.0	.8	2.1	1.4
26	1.9	.5	1.4	.9	.4	.5	.8	.4	1.0	.8	4.3	3.5
27	2.0	.5	1.4	.6	.5	.5	.7	.4	1.0	.8	3.1	3.6
28	3.0	18.8	2.5	.6	.3	.4	.8	.4	.8	.8	2.5	3.6
29	3.8	.....	16.0	.5	.3	.4	.8	.4	.8	.8	2.1	3.0
30	3.6	.....	5.4	.6	.3	.4	.8	.8	.8	.8	2.2	3.0
31	3.4	.....	3.2	.....	.3	.....	.6	.8	.....	.8	.....	3.0
1903												
1	2.5	1.0	9.2	3.9	1.7	4.5	1.2	.6	.5	.5	.7	.4
2	1.5	1.1	4.0	3.4	1.7	7.2	1.2	.8	.5	.5	.8	.4
3	1.0	1.6	2.0	2.9	1.6	4.7	1.1	1.1	.5	.5	1.0	.4
4	1.0	3.2	2.5	2.8	1.8	4.0	1.7	.7	.5	.5	1.0	.4
5	1.0	4.0	2.4	2.5	1.6	10.8	1.1	.7	.6	.5	1.5	.4
6	.8	2.0	2.9	2.3	1.4	7.5	1.0	.7	.6	.5	1.0	.4
7	.8	2.6	2.3	2.2	1.4	6.0	1.0	.7	.5	.5	.7	.4
8	.8	3.0	2.5	3.4	1.4	2.5	1.3	.6	.5	.5	.5	.4
9	.8	4.2	2.6	3.4	1.4	2.5	1.2	.6	.5	.9	.5	.4
10	.7	2.5	3.5	2.5	1.3	2.6	1.2	.6	.5	.6	.5	.4
11	2.8	7.0	11.0	2.2	1.3	2.5	1.2	.6	.4	.6	.5	.4
12	2.0	6.2	5.5	2.2	1.3	2.0	1.2	.7	.4	.6	.5	.4
13	1.8	3.1	3.5	5.2	1.3	1.6	5.3	.7	.4	.6	.5	.5
14	1.8	2.1	2.9	6.0	1.3	1.5	2.7	.7	.4	.6	.5	.5
15	1.6	2.8	2.5	3.2	1.2	1.3	2.0	2.5	1.0	.6	.5	.4
16	1.6	9.9	2.3	2.5	1.2	1.2	2.0	1.0	1.9	.6	.5	.4
17	1.4	17.7	2.2	2.4	1.1	1.2	2.0	1.0	.8	.8	.5	.4
18	1.4	5.1	2.0	2.3	1.1	1.2	1.9	2.2	.7	1.0	.8	.4
19	1.3	3.2	1.9	2.1	1.1	1.2	1.7	1.0	.5	.8	.6	.4
20	1.3	2.5	1.8	2.1	1.1	1.1	1.6	.9	.5	.8	.6	.5
21	1.3	2.4	5.5	2.2	1.1	1.1	1.6	.8	.5	.7	.5	.4
22	1.8	2.1	3.3	2.1	1.1	1.0	1.4	.8	.5	.7	.5	.4
23	1.6	2.0	13.0	2.0	1.0	1.0	1.2	.7	.5	.6	.5	.4
24	1.4	1.7	6.7	1.8	.9	1.0	1.0	.6	.5	.6	.5	.4
25	1.2	1.5	5.5	1.7	.9	1.0	.9	.5	.5	.6	.5	.5
26	1.2	1.6	3.0	2.3	.9	1.0	.8	.5	.5	.6	.5	.5
27	1.2	1.5	2.6	1.8	.9	1.1	.7	.5	.5	.7	.5	.5
28	1.2	15.0	2.4	1.7	.9	3.0	.7	.5	.5	.7	.5	.6
29	1.2	.....	2.9	1.7	.9	1.7	.7	.5	.5	.7	.4	.6
30	1.2	.....	12.2	1.7	1.8	1.5	.6	.5	.5	.7	.4	.5
31	1.2	.....	5.5	.....	2.6	.....	.6	.5	.....	.7	.....	.5
1904												
1	.4	.6	.7	.6	.5	1.3	.5	.5	.1	— .4	.0	.4
2	.4	.6	.7	.6	.4	.6	.4	1.2	.1	— .4	.1	.4
3	.4	.6	.9	.6	.3	.3	.3	1.2	.1	— .3	.2	.4
4	.4	.6	.7	.4	.3	.1	.2	.5	.3	— .3	.3	.5
5	.4	.6	.7	.4	.3	.0	.6	2.5	.3	— .4	.4	.3
6	.4	.6	.7	.4	.2	.0	.4	.8	.3	— .3	.3	2.0
7	.5	.7	2.1	.7	.2	.5	.2	.4	.1	— .3	.2	.8
8	.5	1.6	1.7	1.0	.8	.2	.3	8.0	.0	— .35	.2	.6
9	.5	1.0	.9	.9	1.1	.0	.1	4.0	.0	— .4	.2	.6
10	.5	.6	.8	.8	.6	— .1	.0	1.0	.0	— .4	.2	.5
11	.6	.6	.8	.7	.3	— .1	.0	.8	— .1	— .3	.2	.6
12	.6	.6	.8	.7	.3	— .1	.2	1.1	— .1	— .3	.2	.5
13	.6	.7	.8	.6	.3	— .1	.3	.8	— .2	— .4	.4	.4
14	.6	.7	2.0	.5	.3	— .1	.3	.5	— .1	— .3	.6	.4
15	.5	.7	1.2	.5	.3	— .2	.1	.4	— .2	— .4	.4	.4
16	.5	.7	.8	.5	.2	— .2	.0	.3	— .3	— .3	.3	.4
17	1.1	.7	.8	.5	.2	— .2	.5	.3	— .3	— .3	.3	.4
18	.9	.6	.7	.5	.2	— .2	.2	.2	— .3	— .3	.3	.4
19	.7	.8	.7	.5	.2	— .3	.4	.1	— .3	— .3	.8	.4
20	.6	2.5	.6	.5	.1	— .3	.0	.2	— .3	— .3	.3	.4

Daily gage height, in feet, of Etowah River at Canton—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
21	.5	1.2	.6	.5	.1	.2	.0	.2	— .3	— .3	.3	.4
22	.7	2.6	1.2	.6	.0	.1	— .1	.0	— .3	— .2	.4	.5
23	1.7	1.0	.6	.5	.0	— .2	.1	.1	— .3	— .1	.7	.5
24	1.0	1.0	.6	.4	.0	— .3	.1	.7	— .4	— .2	.5	.5
25	.7	.8	.8	.4	.0	.1	.0	.5	— .4	— .1	.4	.6
26	.7	.8	.8	.5	— .1	.0	1	.3	— .4	.0	.3	.6
27	.7	.7	.8	.5	— .1	— .1	— .1	.4	— .4	.0	.3	.6
28	.7	.6	.7	.5	— .2	.1	.0	.3	— .2	.0	.3	2.5
29	.8	.6	.7	.5	— .3	.6	.0	.1	— .2	.0	.3	1.0
30	.7	.....	.7	.5	— .3	3.8	.0	.1	— .3	.0	.3	.7
31	.....	.....	.6	.....	1.3	.....	.0	0	.....	.0	.....	.6
1905												
1	.5	.5	.7	.7	8	.6	1.7	.5	.2	.5	.1	.3
2	.5	.5	.7	.7	.7	.6	1.0	.4	2.0	.4	.0	.3
3	.6	.5	.6	7	.6	.5	.8	.3	.6	.4	.0	15.2
4	.5	.5	6	.7	1.5	.5	.6	2	.5	.3	.0	7.5
5	.5	.6	6	.8	.9	.5	1.8	.2	.4	.3	.0	1.8
6	.6	.8	.7	.9	.9	.5	.7	.2	.3	.2	.0	1.2
7	1.4	1.2	.8	.9	2.5	.5	1.7	.2	.2	.2	.0	.9
8	.8	1.2	.8	.9	1.4	.5	.9	.4	.2	.1	.1	1.0
9	.7	3.7	8	1.3	2 3	.4	1.7	.7	.1	.0	.1	6.5
10	.6	4.0	1.7	1.0	1.1	.4	2.1	.4	.1	.1	.2	3.4
11	.7	2.0	1.0	.7	.9	.4	7.0	2.0	.1	3.0	.3	1.8
12	9.4	1.5	1.0	1.0	.7	.4	4.0	2.5	.5	1.1	.2	1.0
13	10.0	4.8	.9	1.0	.7	1.2	2.0	2.0	.3	.4	.2	.8
14	2.2	2.8	.9	.7	.6	.5	1.5	1.0	.2	.2	.2	.6
15	1.0	1.8	.8	.7	1.0	.7	1.2	1.5	.0	.1	.1	.8
16	1.0	1.0	.8	1.0	4.0	.6	.9	1.0	.0	.3	.1	.7
17	.8	1.0	.7	.7	.9	.7	.7	.8	.0	.2	.1	.6
18	.8	.9	.7	.7	.8	.6	.5	.5	.0	.1	.1	.6
19	.8	.9	.7	.7	.7	.6	.5	.5	.0	.1	.1	.6
20	.7	1.8	.7	.6	.7	1.4	.7	.4	.0	.0	.2	.9
21	.7	9.9	3.0	.6	.7	2.3	.4	.4	.0	.0	.4	3.1
22	.6	3.9	1.5	.7	.7	3.7	.4	.3	.0	.0	.3	2.0
23	.6	2.0	1.0	.6	1.0	2.0	.4	.3	— .1	.0	.2	1.6
24	.5	1.3	1.0	.6	6.5	1.1	.4	.3	— .1	.0	.2	1.3
25	.5	1.0	.9	.6	1.9	.9	.4	.8	— .1	.1	.4	1.0
26	.5	.8	.9	.6	1.2	.9	.4	.4	— .1	.2	.5	.8
27	.5	.8	.9	.6	1.1	.8	.3	.3	— .1	.5	.3	.7
28	.5	.8	.8	.6	1.0	1.2	.3	.2	— .1	.3	.3	.7
29	.5	.....	.8	.6	.9	1.1	1.3	.2	.0	.2	.3	1.2
30	.6	.....	.8	1.3	.9	.9	.5	.2	.0	.1	.2	1.0
31	.6	.....	.8	.....	.8	.....	.7	.2	.....	.1	.....	.8

Rating tables for Etowah River at Canton.

JANUARY 1 TO DECEMBER 31, 1896.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
—0.75	200	0.50	810	1.80	1,880	3.20	3,460
—0.70	210	0.60	870	1.90	1,970	3.40	3,700
—0.60	240	0.70	950	2.00	2,060	3.60	3,940
—0.50	270	0.80	1,025	2.10	2,160	3.80	4,100
—0.40	320	0.90	1,110	2.20	2,260	4.00	4,350
—0.30	360	1.00	1,180	2.30	2,370	4.20	4,600
—0.20	410	1.10	1,250	2.40	2,480	4.40	4,850
—0.10	470	1.20	1,340	2.50	2,590	4.60	5,100
0.00	510	1.30	1,430	2.60	2,700	4.80	5,350
0.10	565	1.40	1,520	2.70	2,830	5.00	5,600
0.20	625	1.50	1,610	2.80	2,960		
0.30	680	1.60	1,700	2.90	3,100		
0.40	750	1.70	1,790	3.00	3,225		

Rating tables for Etowah River at Canton—Continued.

JANUARY 1 TO OCTOBER 10, 1897, AND JULY 24 TO DECEMBER 31, 1898.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
—0.70	244	0.60	1,059	1.90	2,067	8.00	7,130
—0.60	284	.70	1,129	2.00	2,150	9.00	7,980
—0.50	344	.80	1,200	2.20	2,316	10.00	8,790
—0.40	405	.90	1,273	2.40	2,482	11.00	9,620
—0.30	467	1.00	1,347	2.60	2,648	12.00	10,450
—0.20	530	1.10	1,422	2.80	2,814	13.00	11,280
—0.10	598	1.20	1,498	3.00	2,980	14.00	12,110
0.00	657	1.30	1,576	3.50	3,395	15.00	12,940
.10	722	1.40	1,655	4.00	3,810	16.00	13,770
.20	788	1.50	1,735	4.50	4,225	17.00	14,600
.30	855	1.60	1,818	5.00	4,640	18.00	15,430
.40	922	1.70	1,901	6.00	5,470	19.00	16,260
.50	990	1.80	1,984	7.00	6,300	20.00	17,090

OCTOBER 11 TO DECEMBER 31, 1897.

0.10	335	0.60	763	1.10	1,198	1.60	1,633
0.20	415	0.70	850	1.20	1,285	1.70	1,720
0.30	502	0.80	937	1.30	1,372	1.80	1,807
0.40	589	0.90	1,024	1.40	1,459	1.90	1,894
0.50	676	1.00	1,111	1.50	1,546	2.00	1,981

JANUARY 1 TO JULY 23, 1898.[b]

0.00	270	1.30	1,379	2.60	2,562	3.90	3,720
0.10	325	1.40	1,470	2.70	2,653	4.00	3,800
0.20	380	1.50	1,561	2.80	2,744	4.10	3,884
0.30	470	1.60	1,652	2.90	2,835	4.20	3,968
0.40	560	1.70	1,743	3.00	2,926	4.30	4,052
0.50	651	1.80	1,834	3.10	3,017	4.40	4,136
0.60	742	1.90	1,925	3.20	3,108	4.50	4,220
0.70	833	2.00	2,016	3.30	3,199	4.60	4,304
0.80	924	2.10	2,107	3.40	3,290	4.70	4,388
0.90	1,015	2.20	2,198	3.50	3,375	4.80	4,472
1.00	1,106	2.30	2,289	3.60	3,460	4.90	4,556
1.10	1,197	2.40	2,380	3.70	3,550	5.00	4,640
1.20	1,288	2.50	2,471	3.80	3,640		

JANUARY 1, 1899, TO JULY 31, 1902.[c]

—0.50	225	0.10	590	0.70	1,071	1.30	1,569
— .40	275	.20	665	.80	1,154	1.40	1,652
— .30	325	.30	740	.90	1,237	1.50	1,735
— .20	385	.40	820	1.00	1,320		
— .10	450	.50	905	1.10	1,403		
.00	515	.60	988	1.20	1,486		

AUGUST 1 TO DECEMBER 31, 1902.

0.20	350	1.30	1,130	2.40	2,120	3.50	3,110
.30	390	1.40	1,220	2.50	2,210	3.60	3,200
.40	420	1.50	1,310	2.60	2,300	3.70	3,290
.50	470	1.60	1,400	2.70	2,390	3.80	3,380
.60	530	1.70	1,490	2.80	2,480	3.90	3,470
.70	600	1.80	1,580	2.90	2,570	4.00	3,560
.80	680	1.90	1,670	3.00	2,660	4.20	3,740
.90	770	2.00	1,760	3.10	2,750	4.40	3,920
1.00	860	2.10	1,850	3.20	2,840		
1.10	950	2.20	1,940	3.30	2,930		
1.20	1,040	2.30	2,030	3.40	3,020		

a Above gage height 1.50 this table is a tangent, the difference being 83 per tenth.
b Above gage height 5.00 feet this table is the same as the 1897 table. For the period July 24 to December 31, 1898, use the table which is applicable from January 1 to October 10, 1897.
c Above gage height 1.50 feet this table is the same as the table from January 1 to October 10, 1897.

Rating tables for Etowah River at Canton—Continued.

JANUARY 1 TO AUGUST 15, 1903.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.60	800	1.30	1,450	2.00	2,080	2.70	2,710
.70	900	1.40	1,540	2.10	2,170	2.80	2,800
.80	1,000	1.50	1,630	2.20	2,260	2.90	2,890
.90	1,090	1.60	1,720	2.30	2,350	3.00	2,980
1.00	1,180	1.70	1,810	2.40	2,440		
1.10	1,270	1.80	1,900	2.50	2,530		
1.20	1,360	1.90	1,990	2.60	2,620		

AUGUST 16 TO DECEMBER 31, 1903.

0.40	430	0.90	780	1.40	1,220	1.90	1,670
.50	500	1.00	860	1.50	1,310	2.00	1,760
.60	570	1.10	950	1.60	1,400	2.10	1,850
.70	640	1.20	1,040	1.70	1,490	2.20	1,940
.80	710	1.30	1,130	1.80	1,580	2.30	2,030

JANUARY 1 TO DECEMBER 31, 1904.[b]

—0.40	190	0.20	415	0.80	840	3.00	2,820
— .30	215	.30	470	.90	930	4.00	3,720
— .20	245	.40	532	1.00	1,020	5.00	4,620
— .10	280	.50	600	1.50	1,470	6.00	5,520
.00	320	.60	675	2.00	1,920	7.00	6,420
.10	365	.70	755	2.50	2,370	8.00	7,320

[a] Above gage height 3.00 feet this table is the same as the 1899 table.
[b] Above gage height 1.00 foot the rating curve is a tangent, the difference being 90 per tenth.

Estimated monthly discharge of Etowah River at Canton.

[Drainage area, 604 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec-ft. per sq. mile	Depth in inches
1896.					
January	6,600	810	1,509	2.50	2.88
February	3,850	870	1,603	2.65	2.86
March	1,180	810	970	1.61	1.86
September 9–30	950	200	280	.46	.38
October	2,320	270	476	.79	.91
November	3,940	470	906	1.50	1.67
December	1,180	470	598	.99	1.14
1897					
January	3,478	593	1,194	1.98	2.28
February	2,316	1,059	1,291	2.14	2.23
March	6,466	1,059	2,335	3.86	4.45
April	9,786	1,200	2,238	3.71	4.14
May	2,150	722	1,036	1.72	1.98
June	2,980	657	941	1.56	1.74
July	6,383	657	1,186	1.96	2.26
August	1,347	405	859	1.42	1.64
September	1,200	284	355	.59	.65
October	1,285	244	583	.97	1.12
November	987	335	563	.96	1.07
December	1,981	676	984	1.55	1.79
The year	9,786	244	1,134	1.87	25.35
1898					
January	5,138	380	1,121	1.86	2.14
February	924	470	625	.98	1.02
March	4,640	310	1,014	1.68	1.94
April	3,460	560	1,160	1.92	2.14
May	924	380	584	.97	1.12
June	833	310	497	.82	.91
July	6,549	380	1,388	2.30	2.66
August	5,470	922	2,087	3.46	3.99
September	10,085	922	1,964	3.25	3.62
October	11,695	855	2,286	3.78	4.36
November	2,150	1,059	1,409	2.33	2.60
December	2,483	1,498	1,913	3.17	3.66
The year	11,695	310	1,337	2.21	30.16

Estimated monthly discharge of Etowah River at Canton—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1899					
January	8,790	1,652	2,396	3.97	4.58
February 25 days	8,790	1,652	2,987	4.95	4.30
March	15,596	1,652	3,382	5.60	6.45
April	4,474	1,652	2,344	3.88	4.33
May	1,984	1,320	1,681	2.78	3.21
June	4,142	1,320	1,644	2.72	3.03
July	3,810	1,320	1,770	2.93	3.38
August	1,984	1,154	1,534	2.54	2.93
September	1,154	325	729	1.21	1.35
October	665	225	472	.78	.90
November	1,408	450	614	1.02	1.14
December	2,980	590	1,098	1.82	2.10
The year	15,596	225	1,721	2.85	38.55
1900					
January	1,818	820	976	1.62	1.87
February	12,276	988	2,138	3.54	3.68
March	4,972	1,154	1,989	3.29	3.79
April	4,640	1,154	1,956	3.24	3.61
May	1,984	1,237	1,395	2.31	2.67
June 1–9	5,470	1,652	3,183	5.27	1.76
July	3,810	1,320	1,853	3.07	3.54
August	2,980	988	1,371	2.27	2.62
September	4,640	740	1,347	2.23	2.49
October	6,466	665	2,033	3.37	3.88
November	4,308	1,071	1,970	3.26	3.63
December	2,814	740	1,264	2.09	2.41
1901					
January	14,185	988	1,965	3.25	3.75
February	5,470	1,154	2,185	3.53	3.68
March	14,600	988	1,890	3.13	3.61
April	4,474	1,154	2,299	3.81	4.25
May	14,268	1,154	2,394	3.96	4.57
June	4,889	1,154	2,442	4.04	4.51
July	2,648	905	1,317	2.18	2.51
August	11,280	820	2,538	4.19	4.83
September	2,814	988	1,483	2.46	2.74
October	2,897	590	1,039	1.72	1.98
November	1,320	905	1,052	1.74	1.94
December	17,090	988	2,715	4.50	5.19
The year	17,090	590	1,938	3.21	43.56
1902					
January	3,644	1,652	2,300	3.81	4.39
February	16,094	905	2,698	4.47	4.65
March	13,770	1,652	2,929	4.85	5.59
April	2,814	988	1,533	2.54	2.83
May	1,403	740	960	1.57	1.81
June	2,482	740	1,215	2.01	2.24
July	1,154	740	920	1.52	1.75
August	1,040	350	562	.93	1.07
September	2,660	530	897	1.49	1.66
October	2,480	470	725	1.20	1.38
November	3,330	420	978	1.62	1.81
December	3,740	680	1,737	2.88	3.32
The year	16,094	350	1,454	2.41	32.50
1903					
January	2,800	900	2,136	3.54	4.08
February	15,181	1,180	3,934	6.52	6.79
March	11,280	1,900	4,004	6.63	7.64
April	5,470	1,810	2,618	4.34	4.84
May	2,620	1,090	1,450	2.40	2.77
June	9,454	1,180	2,640	4.37	4.88
July	4,889	800	1,544	2.56	2.95
August	2,580	590	856	1.42	1.64
September	1,670	430	558	.92	1.03
October	860	500	598	.99	1.14
November	1,310	430	586	.97	1.06
December	570	430	459	.76	.89
The year	15,181	430	1,782	2.95	39.72

Estimated monthly discharge of Etowah River at Canton—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1904					
January	1,650	532	720	1.19	1.37
February	2,460	675	916	1.52	1.64
March	2,010	675	914	1.51	1.74
April	1,020	532	650	1.08	1.20
May	1,290	215	469	.776	.895
June	3,540	215	479	.793	.885
July	840	280	418	.692	.798
August	7,320	320	979	1.62	1.87
September	470	190	278	.460	.513
October	320	190	236	.391	.451
November	775	320	490	.795	.887
December	2,370	532	724	1.20	1.38
The year	7,320	190	605	1.00	13.63

ETOWAH RIVER AT ROME.

Measurements were made at this station for several years in connection with the measurements of Coosa River at Rome. Measurements were referred to a bench mark on the bridge, and the gage put in July 1, 1903, by J. M. Giles was referred to the same bench mark. This gage is located at the Second Avenue Bridge in the city of Rome, Ga., about 1 mile above the mouth of the river.

The channel is curved for 1,000 feet above and below the station. Both banks are high and overflow only under the approaches to the bridge. The bed of the stream is of rock and is permanent, but the channel is obstructed by the crib of an old pier foundation in the middle of the river. Discharge measurements have been made from the sidewalk on the upstream side of the single-span iron bridge and its approaches. The initial point for soundings is the center of the post at the end of the iron hand rail on the right bank, upstream side. The gage is a vertical timber driven into the bed of the river and spiked to a birch tree on the left bank about 50 feet below the bridge. The bench mark is the top of the downstream end of the third crossbeam from the left bank end of the bridge; elevation, 43.00 feet above the zero of the gage. The station was discontinued December 31, 1903.

Discharge measurements of Etowah River at Rome.

Date	Gage height	Discharge	Date	Gage height	Discharge
1908	*Feet*	*Sec.-ft.*	1903	*Feet*	*Sec.-ft.*
March 14	9.55	6,316	July 18	2.98	2,376
June 5	13.65	17,130	September 4	1.20	1,293
July 1	3.27	2,986	November 28	1.01	1,080
July 8	3.15	2,704			

Daily gage height, in feet, of Etowah River at Rome.

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908							1903						
1	3.3	3.0	1.0	1.0	1.0	1.0	17	3.4	2.9	2.0	1.2	1.3	1.0
2	3.0	3.6	.9	1.0	1.0	1.0	18	3.2	2.7	1.9	.....	1.5	1.0
3	3.3	3.4	.8	.9	1.3	1.0	19	3.1	2.4	1.8	.....	2.2	1.0
4	3.0	3.3	.7	.8	1.9	1.0	20	3.0	2.2	1.8	.....	1.8	1.0
5	3.5	4.0	.6	.8	2.8	1.0	21	2.9	2.0	1.7	.....	1.3	1.0
6	2.7	3.2	.6	.8	2.2	1.0	22	2.8	1.7	1.6	.....	1.2	1.0
7	2.7	2.9	.6	.7	2.0	1.0	23	2.7	1.6	1.5	.....	1.1	1.0
8	3.1	2.7	.6	.8	1.8	1.0	24	2.5	1.6	1.5	.....	1.1	1.1
9	3.4	2.3	.5	1.0	1.3	1.0	25	2.4	1.5	1.4	.....	1.1	1.2
10	3.3	2.1	.5	1.7	1.0	1.2	26	2.3	1.4	1.3	.....	1.0	1.3
11	3.2	1.9	.5	1.6	1.1	1.1	27	2.4	1.3	1.2	.....	1.0	1.3
12	3.2	1.8	.5	1.4	1.0	1.0	28	2.4	1.3	1.2	.....	1.0	1.3
13	3.6	1.7	.5	1.1	1.6	1.0	29	2.3	1.2	1.1	1.0	1.0	1.3
14	9.0	1.6	.6	1.1	1.5	1.0	30	2.9	1.2	1.1	1.1	1.0	1.3
15	6.4	1.8	1.0	1.0	1.3	1.0	31	2.8	1.1	.....	1.0	.....	1.2
16	4.6	4.1	2.0	1.0	1.3	1.0							

Rating table for Etowah River at Rome from July 1 to December 31, 1903.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.50	900	1.80	1,598	3.20	2,772	5.80	6,180
.60	944	1.90	1,665	3.40	2,010	6.00	6,470
.70	989	2.00	1,733	3.60	2,250	6.20	6,770
.80	1,035	2.10	1,801	3.80	3,490	6.40	7,070
.90	1,082	2.20	1,869	4.00	3,730	6.60	7,375
1.00	1,130	2.30	1,937	4.20	3,975	6.80	7,685
1.10	1,179	2.40	2,005	4.40	4,224	7.00	8,000
1.20	1,230	2.50	2,077	4.60	4,478	7.50	8,800
1.30	1,285	2.60	2,155	4.80	4,741	8.00	9,600
1.40	1,344	2.70	2,241	5.00	5,020	8.50	10,400
1.50	1,405	2.80	2,335	5.20	5,310	9.00	11,200
1.60	1,468	2.90	2,437	5.40	5,600		
1.70	1,532	3.00	2,546	5.60	5,890		

Estimated monthly discharge of Etowah River at Rome.

[Drainage area 1,854 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1908					
July	11,200	1,937	3,246	1.75	2.02
August	3,852	1,179	2,001	1.08	1.25
September	1,733	900	1,206	.65	.73
October 1-17 and 29-31	1,582	989	1,162	.63	.47
November	2,335	1,130	1,359	.73	.81
December	1,285	1,130	1,168	.63	.73

ETOWAH RIVER NEAR ROME.

This station was established August 17, 1904, by M. R. Hall. It is located at Freemans Ferry, about 5 miles above Rome.

The channel is straight for about 3,000 feet above and 1,000 feet below the station. The current is swift. There is a small shoal of rock about 50 feet below the gaging section. About 1,000 feet below there is an old fish-trap dam, but this has not been used for years, and is probably constant. Both banks are high, but are subject to overflow during high water. The bed of the stream is composed of small rock and pebbles, and is uniform and permanent. There is but one channel at all stages, the water being about 2.5 feet deep at low water. Discharge measurements are made from a small boat, the meter being suspended from the ferry cable. Measurements can be made from the bridge at Rome, as no large quantity of water enters the river between the ferry and that place. The initial point for soundings is the center of the windlass for the ferry cable on the left bank of the river.

The original gage, reading from 0 to 7 feet, is attached to a sycamore tree at left edge of river, about 250 feet below the ferry. A second section, reading from 7 to 20 feet, is attached to a post 10 feet upstream from the first section and 10 feet from the edge of the river at low water. A third section, reading from 20 to 30 feet, is attached to a maple tree opposite the post and 15 feet farther from the water's edge. The gage is read once each day by W. A. Gresham, who is paid by the Georgia Geological Survey. Bench marks were established as follows: (1) Head of lag screw driven into root of maple, to which gage 20 to 30 feet is attached; elevation, 19.26 feet. (2) Center mark on copper plug set horizontally in brick wall of F. B. Freeman's residence, on east end of house, near northeast corner, just below floor level; elevation, 27.99 feet. Elevations refer to the datum of the gage.

Discharge measurements of Etowah River near Rome.

Date	Gage height	Discharge	Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*	1905	*Feet*	*Sec.-ft.*
August 18 *a*	2.00	1,049	October 9	1.76	862
August 18 *b*	2.03	1,064	October 9	1.76	850
September 27 *b*	1.37	470			
October 15 *b*	1.26	397	1906		
November 8 *b*	1.50	574	May 8	3.85	3,690
			June 27	3.30	2,850
1905			October 16	2.88	2,180
February 28	3.10	2,468	October 16	2.89	2,160
May 12	2.40	1,613			
July 24	2.11	1,168			

a At Rome, Second Avenue Bridge. *b* At Freeman's Ferry, 5 miles above Rome.

Daily gage height, in feet, of Etowah River near Rome.

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Day	Aug.	Sept.	Oct.	Nov.	Dec.
1904						1904					
1	.....	1.75	1.3	1.3	1.55	17	2.1	1.4	1.3	1.6	1.7
2	.....	1.75	1.3	1.3	1.55	18	2.05	1.4	*a* 1.3	1.55	1.75
3	.....	1.7	1.25	1.5	1.6	19	2.1	1.4	1.25	1.55	1.7
4	.....	1.7	1.35	1.4	1.7	20	1.85	1.4	1.35	1.55	1.7
5	.....	1.75	1.3	1.5	1.8	21	1.8	1.4	1.3	1.55	1.65
6	.....	1.8	1.3	1.6	3.1	22	2.5	1.4	1.3	1.55	1.6
7	.....	1.7	1.3	1.55	3.0	23	1.7	1.4	1.3	1.6	1.6
8	.....	1.65	1.3	1.55	2.2	24	3.4	1.4	1.2	1.9	1.6
9	.....	1.6	1.25	1.55	1.9	25	*a* 3.0	1.35	1.25	1.75	1.6
10	.....	*a* 1.6	1.2	1.55	1.8	26	2.1	1.35	1.3	1.6	1.7
11	.....	1.6	1.35	1.4	1.9	27	*a* 2.5	1.35	1.3	1.6	1.7
12	.....	1.6	1.35	1.4	1.95	28	2.8	1.35	1.3	1.55	3.0
13	.....	1.5	1.4	*a* 1.5	1.8	29	2.8	1.35	1.3	1.55	3.4
14	.....	1.5	1.3	1.6	1.7	30	1.9	1.35	1.3	1.55	2.5
15	.....	1.5	1.3	1.75	1.7	31	1.9	.....	1.3	.....	2.0
16	.....	1.45	1.3	1.6	1.65						

a Gage height interpolated August 25 and 27, September 10, October 18, and November 13, 1904.

Daily gage height, in feet, of Etowah River near Rome—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	2.0	2.3	3.0	2.5	2.9	2.4	2.4	2.1	1.9	2.7	1.9	2.0
2	2.0	2.3	2.9	2.5	2.5	2.3	3.2	2.1	2.0	2.8	1.8	2.1
3	1.9	2.2	2.8	2.5	2.4	2.3	2.9	2.1	2.5	2.1	1.7	5.2
4	2.0	2.1	2.8	2.4	2.4	2.3	2.4	2.1	3.0	2.0	1.7	16.2
5	1.9	2.1	2.7	2.4	3.0	2.4	2.5	2.1	2.9	1.8	1.6	9.1
6	2.3	2.2	2.7	2.7	2.7	2.3	2.8	2.1	2.0	1.8	1.6	3.9
7	2.6	2.25	2.6	2.7	2.7	2.3	4.6	2.1	1.9	1.7	1.6	3.0
8	2.35	3.0	2.6	2.7	3.3	2.2	4.1	2.1	1.9	1.7	1.5	4.1
9	2.3	7.7	2.7	2.6	2.8	2.2	4.4	2.0	1.8	1.6	1.6	13.5
10	2.2	3.4	2.9	2.8	3.3	2.2	4.8	2.5	1.8	2.1	2.1	9.4
11	3.4	5.9	3.3	2.6	2.7	2.2	3.9	2.9	1.8	3.0	2.1	4.5
12	4.7	4.3	2.9	2.6	2.5	2.2	7.0	3.8	2.9	3.7	2.0	3.8
13	15.7	4.5	2.9	3.0	2.4	2.2	6.0	3.1	3.0	2.6	2.0	4.1
14	9.3	7.4	2.8	2.9	2.3	2.3	4.0	2.9	2.1	2.5	1.9	4.5
15	6.2	4.7	2.7	2.7	2.3	2.6	2.9	5.1	2.0	2.3	1.8	4.9
16	3.1	3.7	2.6	2.7	4.9	2.5	2.7	4.0	1.9	2.4	1.8	3.8
17	2.8	3.3	2.5	2.9	4.8	2.5	2.5	3.4	1.8	2.3	1.7	3.6
18	2.5	3.2	2.5	2.6	3.8	2.3	2.4	2.6	1.8	2.3	1.6	3.2
19	2.5	3.0	2.5	2.5	2.7	2.3	2.4	2.5	1.8	2.3	3.3	2.9
20	2.5	3.3	2.6	2.4	2.4	2.5	2.3	2.5	1.7	2.2	2.0	4.0
21	2.5	11.0	4.2	2.4	2.8	2.9	2.3	2.4	1.8	2.1	1.9	.....
22	2.5	10.0	4.5	2.5	3.5	2.5	2.4	2.3	1.7	2.0	1.8	.....
23	2.4	5.8	3.5	2.5	4.2	2.6	2.3	2.3	1.7	1.9	1.8	.....
24	2.35	4.5	3.0	2.4	9.0	3.8	2.1	3.0	1.7	1.9	1.9	4.2
25	2.35	3.8	2.9	2.4	4.8	2.6	2.1	3.0	1.7	2.0	2.1	3.8
26	2.2	3.5	2.8	2.4	3.6	2.3	2.2	2.6	1.6	2.2	2.0	3.5
27	2.0	3.2	2.7	2.4	3.6	2.3	2.1	2.3	1.6	2.3	2.4	3.2
28	2.0	3.1	2.7	2.4	3.2	2.8	2.1	2.3	1.6	2.4	2.3	3.2
29	2.0	.....	2.6	2.3	2.8	3.0	2.3	2.2	1.6	1.9	2.3	3.3
30	1.9	.....	2.5	.....	2.6	2.8	2.3	2.0	1.7	1.9	2.0	3.3
31	2.4	.....	2.5	.....	2.5	.....	2.2	1.9	.....	.....	.....	3.0
1906												
1	2.9	3.8	2.6	5.4	3.3	2.7	2.6	4.0	3.4	10.8	2.75	2.8
2	2.8	3.5	2.6	5.0	3.1	2.9	2.5	3.9	3.1	8.8	2.75	2.8
3	3.9	3.4	4.8	4.5	3.0	3.0	2.5	3.8	2.8	7.9	2.7	2.8
4	15.4	3.4	5.6	4.1	3.5	3.0	2.9	3.7	2.7	6.8	2.7	2.8
5	13.3	3.3	4.9	4.0	3.3	2.9	2.8	3.6	2.7	4.8	2.7	2.7
6	6.5	3.3	3.5	3.9	3.1	2.8	2.6	3.5	5.5	4.5	2.7	2.7
7	4.3	3.2	3.0	3.8	4.0	2.7	3.0	3.3	4.0	4.1	2.7	2.7
8	3.9	3.2	3.0	3.7	4.2	2.6	2.7	3.1	3.9	4.0	2.65	2.7
9	4.0	3.2	4.8	3.6	3.3	2.6	2.6	2.8	4.8	3.8	2.65	2.7
10	3.8	3.1	4.0	4.5	3.0	2.5	3.2	2.7	3.3	3.4	2.6	2.9
11	3.5	3.1	3.5	4.0	2.9	2.5	3.0	3.2	3.3	3.2	2.6	5.8
12	3.5	3.0	3.2	3.5	2.9	3.0	2.8	2.8	3.2	3.2	2.6	5.0
13	3.7	3.0	3.1	3.4	2.8	7.3	2.6	2.7	3.1	3.0	2.6	3.6
14	3.5	3.0	3.2	3.4	2.8	9.5	2.5	2.9	2.9	3.0	2.6	3.6
15	3.4	3.0	16.4	4.0	2.8	7.7	5.5	3.2	2.8	2.9	2.65	3.5
16	3.0	3.0	16.7	3.7	2.7	7.8	4.7	4.0	2.6	2.8	2.7	3.2
17	4.0	2.9	9.4	3.5	2.7	6.5	3.5	4.2	2.5	2.85	2.8	3.0
18	3.6	2.9	5.8	3.5	2.6	3.6	10.5	4.9	2.5	4.0	3.0	4.8
19	3.4	2.8	14.3	3.4	2.6	3.3	8.8	5.0	3.1	8.5	12.9	4.5
20	3.5	2.8	22.7	3.3	2.6	3.1	6.0	3.3	4.8	4.5	10.5	4.0
21	3.2	2.8	20.0	3.3	2.6	3.0	4.3	4.2	3.6	3.6	9.0	4.0
22	7.3	2.9	10.0	3.2	2.6	2.9	4.7	4.0	3.6	3.3	9.0	3.8
23	11.3	3.0	5.3	3.2	2.6	2.8	4.8	4.0	3.5	3.2	8.5	3.4
24	10.7	2.8	4.5	3.1	2.5	2.7	5.3	3.9	3.5	3.1	7.5	3.4
25	5.5	2.8	4.2	3.1	2.5	2.7	3.6	3.5	3.4	3.0	4.0	3.2
26	4.5	2.8	4.0	3.1	2.5	4.4	3.2	3.3	3.4	3.0	3.0	3.0
27	4.5	2.7	4.1	3.0	5.1	3.4	3.0	3.2	3.3	2.9	3.0	3.4
28	4.7	2.7	4.9	3.2	3.7	3.0	2.9	3.0	3.2	2.9	2.9	3.4
29	4.5	.....	5.5	3.5	3.2	2.8	3.3	4.0	3.0	2.8	2.9	3.8
30	4.2	.....	6.0	3.4	2.9	2.7	4.6	4.2	3.2	2.8	2.8	3.7
31	4.0	.....	7.1	.....	2.8	.....	4.4	3.9	.....	2.8	.....	9.8

Rating table for Etowah River near Rome, from August 17, 1904, to December 31, 1905.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.20	360	1.80	830	2.40	1,500	3.00	2,320
1.30	425	1.90	930	2.50	1,625	3.20	2,625
1.40	495	2.00	1,035	2.60	1,755	3.40	2,950
1.50	570	2.10	1,145	2.70	1,890		
1.60	650	2.20	1,260	2.80	2,030		
1.70	735	2.30	1,380	2.90	2,175		

a This station was established for low-water records, and only these are reliable. The above rating table is applicable only to gage heights less than 3.5 feet. As it does not apply to the higher gage heights no monthly estimates have been made for 1905.

Rating table for Etowah River near Rome, for 1905-6.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.50	570	2.90	2,175	4.60	5,100	9.00	15,180
1.60	650	3.00	2,320	4.80	5,480	10.00	17,880
1.70	735	3.10	2,470	5.00	5,860	11.00	20,700
1.80	830	3.20	2,625	5.20	6,260	12.00	23,600
1.90	930	3.30	2,785	5.40	6,660	13.00	26,680
2.00	1,035	3.40	2,950	5.60	7,080	14.00	29,800
2.10	1,145	3.50	3,120	5.80	7,500	15.00	33,000
2.20	1,260	3.60	3,295	6.00	7,930	16.00	36,300
2.30	1,380	3.70	3,470	6.20	8,370	17.00	39,600
2.40	1,500	3.80	3,645	6.40	8,820	18.00	43,000
2.50	1,625	3.90	3,820	6.60	9,280	19.00	46,500
2.60	1,755	4.00	4,000	6.80	9,740	20.00	50,000
2.70	1,890	4.20	4,360	7.00	10,200		
2.80	2,030	4.40	4,720	8.00	12,600		

NOTE.—The above table is based on discharge measurements made during 1904-1906 and is well defined below gage height 4 feet. Above gage height 7 feet the curve becomes uncertain and is only approximate at the high stages.

Estimated monthly discharge of Etowah River near Rome.

[Drainage area, 1,854 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1904					
August (17-31)	2,960	735	1,384	0.746	0.416
September	830	460	588	.317	.354
October	495	360	423	.228	.263
November	930	425	614	.331	.369
December	2,960	610	1,027	.554	.639

Estimated monthly discharge of Etowah River near Rome—Continued.

[Drainage area, 1,800 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1905					
January	35,300	980	3,350	1.86	2.14
February	20,700	1,140	5,250	2.92	3.04
March	4,910	1,620	2,160	1.20	1.38
April	2,320	1,380	1,720	.956	1.07
May	15,200	1,380	2,940	1.63	1.88
June	3,640	1,260	1,610	.894	1.00
July	10,200	1,140	2,650	1.47	1.70
August	6,060	980	1,840	1.02	1.18
September	2,320	650	1,050	.583	.65
October	3,470	650	1,310	.728	.84
November	2,780	570	985	.547	.61
December	37,000	1,040	a7,130	3.96	4.56
The year	37,000	570	2,670	1.48	20.05
1906					
January	34,300	2,030	6,990	3.88	4.47
February	3,640	1,890	2,410	1.34	1.40
March	59,400	1,760	11,700	6.50	7.49
April	6,660	2,320	3,460	1.92	2.14
May	6,060	1,620	2,430	1.35	1.56
June	16,500	1,620	3,900	2.17	2.42
July	19,300	1,620	4,170	2.32	2.68
August	5,860	1,890	3,350	1.86	2.14
September	6,870	1,620	2,940	1.63	1.82
October	20,100	2,030	4,750	2.64	3.04
November	26,400	1,760	5,010	2.78	3.10
December	17,300	1,890	3,580	1.99	2.29
The year	59,400	1,620	4,560	2.53	34.55

a December 21–23 estimated.

NOTE.—Values for 1905 and 1906 are excellent, except March, 1906, which is good.

AMICALOLA RIVER NEAR BALLGROUND.

This station was established in 1905. It is located at Hollenshed's Bridge, one-fourth of a mile above Heard's mill, and about 15 miles northeast of Ballground.

Discharge measurements are made from the two-span covered bridge, about 150 feet in total length. The meter can be let down through the floor at the side of the bridge, but the current here is rough and not good for measurements. Some of the measurements were made about forty feet below the bridge. The stream is important, and a good section is difficult to find, but it is probable that a better place than this will be found.

Gage heights are determined directly from the bench marks, which is a point on top of the downstream end of the wooden floor beam, 25 feet from the left-bank pier; elevation, 17.00 feet above the datum of the assumed gage.

Discharge measurements of Amicalola Creek near Ballground.

Date	Gage height	Discharge
1905	*Feet*	*Sec.-ft.*
June 23	1.58	184
November 16 *a*	1.35	106
November 16 *a*	1.35	100

a Made at different section.

LONG SWAMP CREEK NEAR BALLGROUND.

This station was established in 1905. It is located at a wooden wagon bridge about 2 miles southeast from Ballground, and half a mile above the mouth of the creek, which empties into Etowah River.

The current is swift at the station, also above and below it. The bed is sandy, and the water is shallow. Measurements are made from the downstream side of the wooden bridge of three spans. The middle span, which includes all of the creek at all but high stages, is 50 feet long, and the two end spans are 35 feet each. Gage heights are determined directly from the bench mark, which is a nail driven horizontally into the upstream side of a large sycamore tree on the right bank about 100 feet below the bridge; elevation, 8.00 feet above the datum of the assumed gage.

Discharge measurements of Long Swamp Creek near Ballground.

Date	Gage height	Discharge
1905	*Feet*	*Sec.-ft.*
June 24	1.27	98
November 15	.84	50

COOSA RIVER AT ROME.

Coosa River is formed at Rome by the junction of Etowah and Oostanaula rivers. Both the tributary rivers rise in the northern part of Georgia and flow for the most part through a hilly, broken country, well wooded, about one-fourth of the land being under cultivation. The channel of the Etowah is straight and the current swift and unobstructed, but the Oostanaula is rather sluggish and somewhat obstructed by piers. The banks are high and are liable to overflow at high stages. The gage is in two sections: The first,

0 to 5 feet, is fastened to the downstream left-hand corner of the cofferdam around the center pier of the turn span; the second, 5 to 44 feet, is fastened to the downstream side of the same pier. The zero of the gage is 576 feet above sea level.

The measurements at Rome are made on the Oostanaula and the Etowah just above their junction. The Etowah is measured at the Second Avenue Bridge, and the Oostanaula at the Fifth Avenue Bridge in Rome, and the results are added to give the flow of the Coosa. The gage height is taken from the United States Weather Bureau gage at the Fifth Avenue Bridge on the Oostanaula. There is practically no fall on Oostanaula River from the Fifth Avenue Bridge to the junction; hence the gage is used as a Coosa River gage, and the gage heights are considered as gage heights of Coosa River. The Weather Bureau established this gage in 1890, but now maintains it only from November 1 to April 30; W. M. Towers, the observer, has, however, furnished the Geological Survey with monthly reports of the daily gage height for the entire year.

The station was discontinued December 31, 1903, on account of the uncertain velocity at low stages of the Oostanaula section.

Discharge measurements of Coosa River at Rome.

Date	Gage height	Discharge	Date	Gage height	Discharge
1896	*Feet*	*Sec.-ft.*	1900	*Feet*	*Sec.-ft.*
September 29	0.20	1,209	May 19	2.30	4,496
1897			September 13	.90	1,992
May 7	2.75	4,646	December 8	3.73	6,066
October 5	— .15	990	1901		
1898			January 23	3.60	6,454
May 11	1.90	2,946	April 5	9.90	16,690
September 17	2.60	3,918	June 22	3.70	6,080
October 11	5.05	8,324	October 15	3.15	5,388
October 22	4.10	6,489	1902		
November 30	3.90	6,039	June 24	1.30	2,488
1899			October 8	.80	1,800
January 25	3.80	6,540	November 8	1.10	2,332
January 25	3.60	5,932	1903		
May 19	2.75	4,394	March 14	9.70	16,150
June 16	2.40	3,352	June 5	12.55	25,010
August 4	1.45	2,835	July 1	2.80	5,305
October 13	.60	1,769	July 3	2.70	4,653
1900			July 18	2.85	4,403
February 21	4.80	8,115	September 4	.90	2,211
			November 28	.75	1,892

Daily gage height, in feet, of Coosa River at Rome.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897												
1	1.0	2.8	3.3	7.1	4.1	1.8	1.7	0.8	1.0	0.0	0.5	1.1
2	1.0	9.7	3.2	7.5	4.0	2.3	1.5	.7	.5	.0	.9	1.0
3	1.0	11.5	3.1	8.2	3.5	2.0	1.0	1.2	.3	.0	1.0	1.2
4	1.0	9.6	3.3	9.4	3.3	3.0	.9	1.0	.5	— .1	1.0	2.3
5	1.0	8.2	3.5	14.8	3.0	2.4	2.0	.8	.4	— .1	1.0	3.2
6	1.3	5.2	7.6	18.9	3.0	2.0	1.9	.8	.3	— .1	.8	3.7
7	1.1	5.0	19.7	17.0	3.0	2.0	1.9	1.9	.3	— .1	.8	3.2
8	1.1	4.3	18.9	14.7	2.8	2.0	3.0	2.0	.2	— .1	.8	2.2
9	1.0	5.0	15.4	12.1	2.6	2.0	2.1	2.0	.1	— .1	.8	1.9
10	1.0	4.4	13.5	9.6	2.6	1.9	1.9	1.6	.0	— .1	.7	1.7
11	.9	4.5	12.0	7.2	2.6	1.9	2.5	2.4	.0	— .1	.7	1.5
12	.9	7.4	11.5	6.2	3.0	1.9	2.8	1.8	.0	1.1	.7	1.4
13	.9	8.7	18.6	5.8	3.4	1.8	2.0	1.3	.0	1.6	.7	1.3
14	2.8	7.2	21.3	5.0	4.0	1.7	1.6	.8	.0	1.3	.6	2.2
15	6.2	5.5	23.8	6.0	5.0	1.7	1.3	.6	.0	1.0	.6	4.0
16	5.0	4.5	23.4	7.4	4.0	2.0	1.0	.6	.0	.8	.6	3.5
17	3.5	4.0	22.6	7.0	3.3	2.8	5.2	2.1	.0	.7	.6	2.5
18	3.9	3.7	21.4	5.0	2.8	2.3	4.2	3.2	— .1	.6	.6	2.2
19	5.0	3.4	19.7	4.5	2.7	2.0	4.8	2.4	— .2	.6	.6	1.8
20	3.5	3.0	18.9	4.0	2.6	1.8	8.8	1.4	— .2	.6	.6	1.7
21	8.7	4.0	17.7	3.8	2.5	1.6	12.8	1.3	— 2	1.5	.6	3.2
22	9.5	3.9	15.3	3.7	2.4	1.5	7.3	1.5	— .2	1.3	.5	4.1
23	5.7	5.6	13.7	3.5	2.4	1.5	4.4	1.5	— .2	1.0	.5	5.8
24	4.0	11.7	12.9	3.5	2.4	1.4	3.9	1.5	— .2	.8	.5	5.3
25	3.5	8.6	9.1	3.5	2.3	1.3	2.6	1.1	— .3	.8	.5	3.7
26	3.0	6.7	6.0	3.5	2.2	1.2	2.6	.8	— .3	.7	.5	2.8
27	2.5	4.7	5.2	3.4	2.1	1.2	3.8	.5	— .4	.7	.5	3.8
28	2.5	3.5	4.8	3.4	2.0	1.0	3.0	.4	— .4	.7	.9	2.0
29	2.5	.....	4.5	3.4	2.0	1.1	2.4	.4	— .4	.6	1.1	2.3
30	2.3	.....	4.2	3.2	1.9	2.0	1.4	.4	— .4	.5	1.1	2.0
31	2.2	.....	4.0	.....	1.9	.....	1.2	.5	.....	.5	.....	2.0

Daily gage height, in feet, of Coosa River, at Rome—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1898												
1	1.8	3.6	1.2	9.0	2.8	1.4	1.2	4.8	2.0	2.0	2.2	4.2
2	1.8	3.1	1.2	6.1	2.6	1.4	1.0	4.4	7.8	2.0	2.2	4.0
3	1.7	2.8	1.2	4.2	2.4	1.4	1.0	3.2	21.7	2.0	2.2	3.8
4	1.7	2.6	1.2	3.6	2.3	1.4	1.0	4.4	24.3	4.9	2.2	3.8
5	1.6	2.4	1.2	9.9	2.2	1.3	1.0	8.0	22.2	22.0	2.0	4.3
6	1.6	2.2	1.2	17.2	2.1	1.3	1.3	5.6	20.0	23.8	2.2	5.0
7	1.3	2.0	1.2	14.5	2.0	1.3	2.0	4.4	17.6	19.0	2.6	4.3
8	1.3	1.8	1.2	10.9	2.0	1.3	2.8	4.4	16.4	18.4	2.4	4.0
9	1.3	1.8	1.2	7.0	2.0	1.3	3.2	3.4	9.7	16.6	2.3	3.7
10	1.3	1.7	1.2	4.1	2.0	1.3	1.7	3.0	5.0	14.0	2.1	3.4
11	1.4	1.5	1.2	4.0	2.0	1.3	2.8	9.9	5.4	5.6	2.0	3.3
12	2.0	1.5	1.2	3.8	1.9	1.2	2.0	7.2	4.6	4.2	2.0	3.3
13	2.0	1.3	1.2	3.6	1.8	1.4	1.8	4.2	3.8	3.8	2.0	3.2
14	4.0	1.3	1.3	3.5	1.8	1.8	1.6	3.4	3.2	3.7	2.3	3.0
15	3.8	1.3	1.6	3.5	1.7	1.8	3.7	3.0	3.0	3.5	2.3	3.0
16	3.6	1.3	3.7	3.4	1.6	1.7	3.7	2.5	2.9	3.2	2.9	2.8
17	3.6	1.2	7.3	3.0	1.5	1.8	2.2	2.0	2.7	3.1	2.9	2.7
18	3.2	1.2	5.8	3.0	1.5	1.8	1.9	2.2	2.5	6.5	4.0	2.6
19	2.8	1.2	3.7	3.0	1.5	2.2	1.7	2.2	2.3	9.0	5.0	2.6
20	4.4	1.2	3.0	3.6	1.4	3.6	1.6	3.2	2.2	6.0	4.5	2.6
21	6.5	1.2	2.5	3.6	1.4	3.2	1.5	2.8	2.2	4.2	5.0	2.8
22	6.4	1.2	2.5	3.2	1.4	3.0	1.4	3.9	2.3	3.9	4.0	2.9
23	5.0	1.2	2.3	3.0	1.4	2.8	1.3	2.2	2.6	4.0	5.0	3.2
24	4.5	1.2	2.2	7.2	1.4	2.6	1.8	2.2	4.1	3.9	7.0	3.6
25	7.0	1.2	2.1	8.2	1.4	2.0	3.7	1.9	3.1	3.5	4.7	3.0
26	14.0	1.2	2.0	6.0	1.4	1.8	3.8	2.7	3.0	3.3	3.9	2.9
27	14.6	1.2	1.9	4.6	1.4	1.8	2.9	4.0	2.7	3.1	4.5	2.7
28	11.6	1.2	1.8	4.0	1.4	1.8	3.7	4.4	2.5	3.0	4.3	2.6
29	8.6	.....	2.0	3.7	1.4	1.6	4.2	3.4	2.3	2.8	4.3	2.5
30	4.6	.....	8.5	3.2	1.4	1.4	4.1	2.0	2.1	2.6	3.9	2.4
31	3.9	.....	11.4	.....	1.4	.....	4.2	2.3	.....	2.4	.....	2.4
1899												
1	3.0	6.9	19.7	13.2	4.0	3.0	1.7	2.2	3.4	.4	.7	1.1
2	3.4	7.8	15.0	10.6	3.7	2.6	1.5	1.9	2.0	.3	.6	1.1
3	3.0	6.0	8.6	7.9	3.7	2.6	1.0	1.7	1.6	.3	.5	1.5
4	2.7	9.2	6.6	7.2	3.5	2.0	.9	1.5	1.4	.3	.5	1.3
5	2.6	15.3	7.8	9.5	3.5	2.0	2.0	1.4	1.3	.3	.4	1.1
6	2.6	18.2	9.0	8.2	3.5	2.0	1.9	1.5	1.3	.5	.4	1.0
7	3.6	27.8	8.0	8.2	3.7	2.0	1.9	1.6	1.2	.7	.3	.9
8	5.9	24.0	6.8	15.0	3.7	1.9	3.0	1.5	1.0	.7	.3	.8
9	5.9	22.4	5.7	13.4	3.6	1.8	2.1	1.8	1.0	.8	.3	.8
10	4.9	21.0	5.4	11.2	3.5	1.8	1.9	1.6	1.0	.6	.3	.8
11	4.0	19.0	5.2	9.5	3.3	1.8	2.5	1.4	2.9	1.0	.3	.8
12	4.5	16.5	4.9	7.0	3.1	2.2	2.8	1.4	2.3	.9	.3	2.8
13	4.0	7.0	4.5	6.4	3.1	3.8	2.0	1.2	1.5	.7	.3	6.1
14	3.8	5.0	6.0	5.9	3.0	4.0	1.6	1.1	1.0	.7	.4	5.0
15	3.6	5.0	16.6	5.6	3.0	3.5	1.3	1.3	.9	.6	.4	3.2
16	3.6	5.5	27.7	5.4	2.9	2.5	1.8	1.9	.8	.6	.5	2.0
17	4.0	8.9	29.2	5.2	2.8	2.1	5.2	1.6	.6	.6	.9	1.8
18	4.2	9.5	25.8	4.8	2.8	2.0	4.2	1.4	.6	.6	.7	1.7
19	4.0	8.5	24.9	4.7	2.8	2.0	4.8	1.1	.6	.6	.5	1.3
20	3.7	7.7	26.2	4.6	2.8	2.0	8.8	.9	.7	.6	.5	1.6
21	3.3	6.8	24.6	4.3	2.6	1.8	12.8	.9	.7	.7	.5	2.0
22	3.2	6.9	23.0	4.1	2.6	2.2	7.9	.8	.6	.7	.4	2.0
23	3.1	7.3	22.6	4.0	2.4	1.7	4.8	.8	.6	.6	1.0	1.8
24	3.5	6.6	21.9	5.4	2.6	1.7	3.9	.7	.5	.5	2.1	7.2
25	3.8	5.8	18.0	7.4	2.5	1.7	2.6	.7	.5	.4	1.5	7.5
26	3.8	5.5	10.5	9.1	2.4	1.7	2.6	.7	.5	.4	2.5	5.0
27	3.3	19.1	7.7	6.7	2.2	2.1	3.8	2.5	.5	.4	3.0	3.5
28	3.0	23.4	6.8	5.5	2.2	1.9	3.0	2.5	.6	.4	2.2	3.0
29	3.0	.....	8.8	4.8	2.0	1.9	2.4	2.5	.5	.4	1.9	3.0
30	2.9	.....	9.3	4.2	2.0	1.8	1.4	2.0	.4	.5	1.4	3.4
31	4.4	.....	10.2	.....	3.3	.....	1.2	2.5	.....	.8	.....	2.0

Daily gage height, in feet, of Coosa River, at Rome—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900												
1	2.0	2.0	4.2	4.4	6.2	2.4	10.5	3.4	1.5	1.2	2.1	3.2
2	1.6	1.8	5.8	4.2	4.8	2.5	8.0	3.2	1.5	1.2	2.2	2.8
3	1.5	1.6	5.6	4.0	4.0	2.8	8.0	3.0	1.7	1.0	2.0	2.6
4	1.5	2.0	4.4	4.0	4.0	4.2	7.0	2.8	1.7	1.0	2.8	3.5
5	1.5	3.0	4.1	4.0	3.8	4.2	5.5	2.6	1.5	.9	2.8	7.4
6	1.5	3.8	3.8	4.0	3.7	4.2	4.2	2.5	1.5	.9	2.1	6.8
7	1.5	2.8	5.0	3.8	3.6	4.8	3.8	2.2	1.4	.9	2.1	5.2
8	1.5	2.4	3.2	3.8	3.4	13.0	3.8	2.2	1.0	3.8	2.0	3.8
9	1.5	4.0	15.0	3.6	3.0	12.6	4.3	2.0	1.0	5.9	1.9	3.6
10	1.5	6.9	13.4	3.5	3.0	8.0	4.3	2.0	.8	2.6	1.8	3.2
11	2.0	7.0	10.3	6.0	3.0	5.9	3.8	1.8	.8	2.0	1.8	2.8
12	7.0	6.4	7.5	11.0	3.0	5.0	3.4	1.8	.8	1.8	1.6	2.6
13	9.0	22.6	5.5	7.4	2.5	5.2	3.8	1.8	.8	2.5	1.5	2.6
14	7.2	27.2	4.8	5.5	2.4	5.3	3.4	1.7	.8	3.2	1.5	2.4
15	5.5	25.3	4.2	4.5	2.4	4.2	3.4	2.0	6.5	3.0	1.5	2.2
16	3.5	21.2	5.3	5.6	2.4	3.8	3.3	1.7	11.1	2.0	1.5	2.2
17	3.0	18.0	5.6	6.2	2.4	4.3	3.1	1.6	7.0	1.6	1.5	2.2
18	2.9	10.7	4.5	11.0	2.4	6.0	3.0	1.3	3.2	1.5	1.4	2.0
19	5.0	5.0	5.2	11.1	2.9	6.5	2.8	2.2	2.3	1.5	1.4	2.0
20	11.3	4.0	15.9	11.4	3.0	7.2	2.6	2.0	2.0	1.4	1.6	2.8
21	10.6	4.1	17.5	13.6	2.6	4.2	2.5	1.6	1.8	1.8	1.8	6.7
22	8.5	6.8	14.6	12.7	2.5	3.6	2.4	1.6	1.8	1.8	2.1	8.0
23	5.8	7.6	10.4	10.5	2.3	5.5	2.4	1.6	1.6	1.6	2.1	7.0
24	4.0	6.0	7.2	8.6	2.9	14.2	2.4	1.9	1.6	1.6	2.0	6.6
25	3.4	5.8	8.8	8.5	3.2	18.2	3.6	2.4	1.5	1.5	5.0	6.6
26	3.1	5.2	13.0	6.5	2.7	17.0	2.8	2.0	1.5	1.5	11.0	5.6
27	2.8	4.6	12.1	5.3	2.6	15.5	6.2	1.8	1.4	1.4	11.5	4.0
28	2.6	4.0	8.9	4.8	2.5	15.6	6.8	1.6	1.4	2.2	8.6	3.8
29	2.4	.....	5.8	4.3	2.4	14.2	6.2	1.5	1.3	2.2	7.0	3.6
30	2.1	.....	5.7	6.0	2.9	10.0	4.5	1.5	1.3	2.1	4.0	3.5
31	2.0	.....	5.3	.....	3.0	.....	4.0	1.5	.....	2.1	.....	5.6
1901												
1	7.4	6.4	3.0	3.8	4.0	10.6	3.6	1.8	6.4	2.6	1.2	1.3
2	6.4	5.8	3.0	3.6	3.8	7.6	3.0	1.8	5.3	2.6	1.2	1.3
3	5.2	5.5	3.0	13.0	3.8	5.6	3.0	1.8	3.7	3.2	1.2	1.3
4	4.2	15.8	3.0	13.0	3.8	6.4	2.6	1.6	3.4	3.0	1.2	1.5
5	4.0	18.5	3.0	10.0	3.6	5.0	2.4	1.6	3.0	2.8	1.2	2.0
6	3.8	13.8	3.0	7.9	3.5	4.0	2.2	2.6	2.9	2.2	1.2	1.8
7	3.5	9.5	3.0	6.4	3.5	7.0	5.2	5.3	2.6	2.0	1.2	1.8
8	3.2	6.5	3.0	5.6	3.4	7.6	4.8	5.9	2.2	1.9	1.1	1.8
9	3.0	9.6	2.8	5.2	3.3	5.4	3.3	3.0	2.0	1.9	1.1	1.8
10	2.8	12.5	5.5	4.5	3.1	4.3	2.6	2.6	2.0	1.8	1.1	1.8
11	8.8	10.5	7.8	4.3	3.0	4.0	2.4	2.5	2.0	1.7	1.0	2.6
12	23.5	7.6	8.0	4.2	2.9	3.8	2.3	3.4	2.0	1.6	1.0	2.6
13	27.0	6.5	6.7	4.3	2.8	3.8	2.0	3.0	1.8	1.8	1.0	2.1
14	23.8	5.6	4.8	10.4	2.8	4.0	2.0	2.3	2.0	2.0	1.0	2.2
15	21.4	5.0	4.0	10.1	2.7	4.3	2.0	4.5	3.0	3.2	1.0	16.4
16	19.8	4.8	3.6	7.7	2.6	6.9	1.9	7.2	2.4	2.6	1.0	17.6
17	17.4	4.2	3.2	5.8	2.6	6.0	1.7	10.5	6.0	2.4	1.0	14.7
18	8.9	4.2	3.0	5.2	2.5	5.0	5.5	9.8	11.2	2.4	1.0	14.0
19	5.0	4.2	3.0	9.0	2.5	4.8	3.0	10.8	11.1	2.0	1.0	13.0
20	4.0	4.0	3.0	18.6	3.0	4.0	3.0	12.5	7.0	1.8	1.0	5.6
21	3.8	3.8	3.0	17.2	10.0	3.8	2.4	10.8	3.9	1.8	1.6	3.0
22	3.8	3.7	3.0	15.5	23.6	3.6	2.4	14.5	3.7	1.6	1.2	2.0
23	3.8	3.6	3.0	14.6	26.4	3.6	2.4	20.8	3.3	1.6	1.4	2.0
24	3.8	3.6	3.6	12.7	21.8	3.6	2.0	23.2	2.8	1.6	1.4	3.6
25	6.7	3.5	3.6	6.8	18.9	2.7	2.0	18.3	2.6	1.6	1.3	4.0
26	6.6	3.2	22.0	5.6	16.5	2.7	1.9	13.1	2.5	1.4	1.3	3.7
27	5.4	3.2	27.0	4.8	11.1	3.2	1.7	6.6	2.3	1.3	1.3	5.7
28	5.2	3.0	24.5	4.4	5.5	3.0	2.8	8.8	2.0	1.3	1.3	6.0
29	5.0	.....	21.3	4.2	4.9	3.6	1.9	7.5	2.0	1.3	1.3	21.5
30	4.6	.....	19.2	4.1	4.7	3.6	1.9	6.2	2.5	1.3	1.8	29.8
31	6.8	.....	16.1	.....	5.4	.....	1.6	5.6	.....	1.2	.....	32.6

Daily gage height, in feet, of Coosa River, at Rome—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1902												
1	28.0	11.8	28.5	21.3	2.9	1.8	1.0	1.2	1.0	1.6	.2	1.9
2	24.6	22.0	27.6	14.8	2.9	1.7	1.0	1.0	.8	1.6	.2	2.0
3	21.9	24.0	24.1	7.2	3.7	1.7	1.1	.8	1.2	1.6	.2	6.2
4	17.6	20.0	21.6	5.8	3.4	1.7	1.0	.8	1.0	1.5	.2	6.8
5	6.6	15.6	19.2	5.7	3.2	1.7	.9	1.5	1.2	1.0	.2	5.8
6	5.6	9.8	14.0	5.2	3.0	1.7	.9	1.4	1.0	2.0	.4	5.0
7	4.6	6.3	10.1	6.7	2.9	1.7	1.0	1.2	.8	1.4	2.0	4.0
8	4.2	5.7	8.7	6.7	2.8	1.7	.9	1.2	.6	.9	1.6	2.7
9	4.0	5.0	7.2	7.7	2.6	2.0	.9	.6	.9	.8	1.0	2.5
10	3.9	4.6	7.0	6.6	2.6	1.9	.9	.4	1.0	.7	.8	1.9
11	3.6	4.4	6.6	5.6	2.5	1.9	.9	.3	.9	2.3	.8	1.6
12	3.5	4.0	6.0	5.0	2.4	1.8	1.4	.3	.7	2.2	.7	1.4
13	3.4	3.9	5.6	4.7	2.3	1.7	1.5	1.0	.6	2.2	.6	1.2
14	3.2	3.8	5.5	4.5	2.3	1.7	1.8	.6	2.5	2.0	.6	1.2
15	3.0	3.8	5.0	4.4	2.3	1.6	1.4	.6	1.9	1.8	.6	1.1
16	2.8	4.0	7.0	4.3	2.4	1.6	2.0	.8	1.0	1.6	.6	2.4
17	2.7	4.5	14.0	4.5	2.5	1.6	1.4	.6	.7	1.5	.6	4.3
18	2.7	4.7	11.6	5.7	2.3	1.5	1.2	.5	.4	1.3	.9	4.5
19	3.0	4.5	8.6	5.0	2.3	1.5	1.0	.4	.4	1.1	1.5	3.8
20	3.2	4.0	6.2	4.0	2.4	1.9	1.0	1.0	.4	.9	1.3	3.0
21	3.6	4.0	5.6	3.9	2.4	1.6	.9	1.3	1.0	.8	1.1	4.9
22	4.2	5.0	5.1	3.8	2.3	1.8	.8	1.0	.8	.7	1.1	5.8
23	5.0	5.6	5.0	3.7	2.3	1.5	.8	.9	.6	.6	1.0	5.8
24	4.0	5.3	4.7	3.5	2.1	1.3	.7	.7	.3	.5	.9	5.2
25	3.9	5.0	4.7	3.3	2.0	1.3	.6	.5	2.2	.4	1.6	3.8
26	3.6	5.5	4.6	3.2	2.0	1.2	.5	.5	4.0	.3	3.1	3.0
27	3.6	5.5	4.2	3.2	2.0	1.2	.5	.6	3.3	.2	4.8	2.6
28	4.2	22.7	5.0	3.0	1.8	1.1	.5	1.2	2.0	.4	3.8	2.2
29	6.5	.....	20.6	3.0	1.8	1.0	.7	1.7	2.0	.4	2.4	2.2
30	5.8	.....	28.9	2.9	1.8	1.0	2.0	1.0	1.8	.3	2.2	2.6
31	5.4	.....	26.8	.....	1.8	.....	1.6	1.0	.....	.3	.....	4.0
1903												
1	3.0	2.8	28.6	24.9	3.6	6.0	3.0	2.8	1.0	.4	.7	.9
2	3.9	2.8	27.1	22.0	3.6	7.7	3.2	2.6	.9	.4	.7	.9
3	3.9	4.2	24.0	19.5	3.6	9.0	2.9	3.0	.9	.4	.8	.8
4	5.0	8.4	22.3	14.6	3.5	7.5	2.7	3.3	.9	.3	1.5	.7
5	4.3	13.2	20.5	8.0	3.5	11.7	2.6	3.2	.8	.3	1.5	.7
6	4.0	13.4	15.4	7.0	3.3	17.1	2.6	6.2	.7	.3	2.0	.7
7	3.7	9.7	9.9	6.4	3.4	11.7	2.6	4.6	.7	.2	2.0	.7
8	3.0	18.7	7.7	7.7	3.5	6.9	2.4	3.6	.6	.5	1.6	.7
9	2.8	21.6	6.6	10.5	3.5	5.3	2.6	3.4	.6	1.4	1.4	.7
10	2.4	16.5	10.5	8.4	3.4	4.4	2.6	3.0	.6	1.6	1.3	.7
11	3.0	15.1	11.6	6.7	3.3	4.3	2.5	2.6	.6	1.5	1.2	.7
12	5.0	21.8	16.0	6.3	3.3	6.0	2.9	2.2	.6	1.4	1.2	.6
13	5.0	19.6	14.0	5.6	3.0	4.6	5.9	2.0	.6	1.3	1.2	.6
14	4.8	14.5	10.1	14.3	3.0	4.2	11.1	2.0	.6	1.1	1.2	.6
15	3.9	11.1	9.4	13.0	3.1	4.0	6.7	1.6	.6	.9	1.0	.6
16	2.5	8.7	7.8	9.5	3.3	3.8	3.7	4.3	.9	.8	1.0	.6
17	2.4	24.7	6.8	7.4	3.0	3.4	3.5	3.2	1.7	1.2	1.0	.6
18	2.4	28.7	6.3	6.2	3.0	3.0	3.3	2.8	2.0	1.3	1.0	.6
19	2.4	25.5	5.7	5.3	2.8	2.4	3.0	2.2	1.5	1.2	1.5	.6
20	2.4	21.0	5.3	5.7	2.5	2.7	2.9	2.1	1.2	1.0	1.4	.6
21	2.2	15.2	11.0	5.8	2.5	2.5	2.5	2.0	.9	.8	1.3	.7
22	2.0	7.1	11.6	5.5	2.6	2.4	2.4	2.0	.8	.8	1.2	1.3
23	2.0	5.8	16.9	4.9	2.6	2.2	3.0	1.9	.7	.7	1.1	1.3
24	2.0	5.1	22.6	4.7	2.5	2.2	3.0	1.8	.5	.7	1.0	1.0
25	2.0	4.8	20.6	4.4	2.5	2.2	2.6	1.6	.5	.7	1.0	.9
26	2.0	4.5	16.0	4.9	2.3	2.2	2.4	1.5	.5	.6	1.0	.9
27	2.0	4.0	9.7	4.7	2.1	2.4	2.1	1.4	.5	.6	1.0	.9
28	2.4	23.1	6.9	4.0	2.0	6.8	2.0	1.4	.5	.5	.9	.9
29	3.2	.....	7.8	3.9	2.0	6.8	1.8	1.3	.4	.4	.9	.9
30	4.2	.....	22.5	3.7	2.4	4.0	2.3	1.3	.4	.4	.9	.9
31	3.8	.....	27.6	.....	6.7	.....	2.6	1.2	.....	.7	.....	.9

Rating tables for Coosa River at Rome.

JANUARY 1, 1897, TO DECEMBER 31, 1898.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
— 0.40	900	1.70	2,690	3.80	6,910	7.80	13,710
— .30	935	1.80	2,810	3.90	6,105	8.00	14,100
— .20	970	1.90	2,930	4.00	6,300	8.50	15,075
— .10	1,010	2.00	3,060	4.20	6,690	9.00	16,050
.00	1,070	2.10	3,190	4.40	7,080	10.00	18,000
.10	1,140	2.20	3,320	4.60	7,470	11.00	19,950
.20	1,210	2.30	3,460	4.80	7,860	12.00	21,900
.30	1,280	2.40	3,610	5.00	8,250	13.00	23,850
.40	1,360	2.50	3,760	5.20	8,640	14.00	25,800
.50	1,440	2.60	3,910	5.40	9,030	15.00	27,750
.60	1,520	2.70	4,060	5.60	9,420	16.00	29,700
.70	1,610	2.80	4,220	5.80	9,810	17.00	31,650
.80	1,700	2.90	4,380	6.00	10,200	18.00	33,600
.90	1,800	3.00	4,540	6.20	10,590	19.00	35,550
1.00	1,900	3.10	4,700	6.40	10,980	20.00	37,500
1.10	2,000	3.20	4,860	6.60	11,370	21.00	39,450
1.20	2,110	3.30	5,020	6.80	11,760	22.00	41,400
1.30	2,220	3.40	5,180	7.00	12,150	23.00	43,350
1.40	2,330	3.50	5,340	7.20	12,540	24.00	45,300
1.50	2,450	3.60	5,520	7.40	12,930		
1.60	2,570	3.70	5,715	7.60	13,320		

JANUARY 1 TO DECEMBER 31, 1899.[b]

0.30	1,470	2.50	3,900	4.70	8,107	10.00	18,760
.40	1,550	2.60	4,060	4.80	8,308	11.00	20,770
.50	1,630	2.70	4,220	4.90	8,509	12.00	22,780
.60	1,710	2.80	4,380	5.00	8,710	13.00	24,790
.70	1,790	2.90	4,540	5.20	9,112	14.00	26,800
.80	1,870	3.00	4,700	5.40	9,514	15.00	28,810
.90	1,950	3.10	4,900	5.60	9,916	16.00	30,820
1.00	2,030	3.20	5,100	5.80	10,318	17.00	32,830
1.10	2,124	3.30	5,300	6.00	10,720	18.00	34,840
1.20	2,218	3.40	5,500	6.20	11,122	19.00	36,850
1.30	2,312	3.50	5,700	6.40	11,524	20.00	38,860
1.40	2,406	3.60	5,900	6.60	11,926	21.00	40,870
1.50	2,500	3.70	6,100	6.80	12,328	22.00	42,880
1.60	2,620	3.80	6,300	7.00	12,730	23.00	44,890
1.70	2,740	3.90	6,500	7.20	13,132	24.00	46,900
1.80	2,860	4.00	6,700	7.40	13,534	25.00	48,910
1.90	2,980	4.10	6,901	7.60	13,936	26.00	50,920
2.00	3,100	4.20	7,102	7.80	14,338	27.00	52,930
2.10	3,260	4.30	7,303	8.00	14,740	28.00	54,940
2.20	3,420	4.40	7,504	8.50	15,745	29.00	56,950
2.30	3,580	4.50	7,705	9.00	16,750	30.00	58,960
2.40	3,740	4.60	7,906	9.50	17,755		

JANUARY 1, 1900, TO DECEMBER 31, 1901.[c]

0.80	1,980	1.70	2,985	2.60	4,300	3.50	5,755
.90	2,020	1.80	3,120	2.70	4,450	3.60	5,930
1.00	2,110	1.90	3,260	2.80	4,600	3.70	6,115
1.10	2,230	2.00	3,400	2.90	4,750	3.80	6,300
1.20	2,350	2.10	3,550	3.00	4,900	3.90	6,500
1.30	2,475	2.20	3,700	3.10	5,065	4.00	6,700
1.40	2,600	2.30	3,850	3.20	5,230		
1.50	2,725	2.40	4,000	3.30	5,405		
1.60	2,850	2.50	4,150	3.40	5,580		

JANUARY 1 TO DECEMBER 31, 1902.[d]

0.20	1,410	0.50	1,635	0.70	1,810	0.90	2,005
.30	1,480	.60	1,720	.80	1,905	1.00	2,110
.40	1,555						

a Above gage height 4.00 feet the rating curve is a tangent, the difference being 195 per tenth.
b Above gage height 4.00 feet the rating curve is a tangent, the difference being 201 per tenth.
c Above gage height 4.00 feet this table is the same as the 1899 table.
d Above gage height 1.00 foot this table is the same as the 1901 table.

Rating tables for Coosa River at Rome—Continued.

JANUARY 1 TO DECEMBER 31, 1903.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.20	1,280	1.20	2,580	2.20	3,910	3.40	5,725
.30	1,390	1.30	2,660	2.30	4,055	3.60	6,055
.40	1,510	1.40	2,790	2.40	4,200	3.80	6,400
.50	1,630	1.50	2,920	2.50	4,345	4.00	6,760
.60	1,750	1.60	3,060	2.60	4,495	4.20	7,140
.70	1,880	1.70	3,200	2.70	4,645	4.40	7,520
.80	2,010	1.80	3,340	2.80	4,795	4.60	7,910
.90	2,140	1.90	3,480	2.90	4,945	4.80	8,310
1.00	2,270	2.00	3,620	3.00	5,095	5.00	8,710
1.10	2,400	2.10	3,765	3.20	5,405		

a Above gage height 5.00 feet this table is the same as the 1899 table.

Estimated monthly discharge of Coosa River at Rome.

[Drainage area, 4,006 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1897					
January	17,025	1,800	4,820	1.20	1.38
February	20,925	4,220	10,100	2.52	2.62
March	44,910	4,700	22,587	5.63	6.49
April	35,150	48,600	12,304	3.07	3.43
May	8,250	2,930	4,421	1.10	1.27
June	4,540	1,900	2,884	.72	.80
July	23,460	1,800	5,184	1.30	1.50
August	4,860	1,360	2,256	.56	.64
September	1,900	900	1,106	.28	.31
October	2,570	1,010	1,518	.38	.44
November	2,000	1,440	1,626	.41	.46
December	9,810	1,900	4,086	1.02	1.18
The year	44,910	900	6,070	1.52	20.52
1898					
January	26,970	22,200	7,272	1.82	2.10
February	5,520	2,110	2,705	.68	.71
March	20,730	2,110	4,384	1.10	1.27
April	32,040	4,540	9,430	2.36	2.63
May	4,220	2,330	2,778	.69	.79
June	5,520	2,110	2,866	.72	.80
July	6,690	1,900	3,670	9.17	10.59
August	17,805	2,930	6,079	1.52	1.75
September	45,885	3,060	12,114	3.03	2.26
October	44,910	3,060	11,830	2.96	3.41
November	12,150	3,060	5,213	1.30	1.45
December	8,250	3,610	4,996	1.25	1.44
The year	45,885	1,900	6,111	2.22	29.20
1899					
January	10,519	4,060	6,092	1.52	1.75
February	54,538	8,710	22,586	5.62	5.85
March	57,352	7,705	26,314	6.57	7.57
April	28,810	6,700	13,333	3.33	3.72
May	6,700	3,100	4,783	1.19	1.37
June	6,700	2,740	3,489	.87	9.97
July	24,388	1,950	5,499	1.37	1.58
August	3,900	1,790	2,596	.65	.75
September	5,500	1,550	2,219	.55	.61
October	2,080	1,470	1,684	.42	.48
November	4,700	1,470	2,009	.50	.56
December	13,735	1,870	4,314	1.08	1.25
The year	57,352	1,470	7,906	1.97	26.46

Estimated monthly discharge of Coosa River at Rome—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1900					
January	21,873	2,725	6,854	1.71	1.97
February	53,332	2,850	14,736	3.68	3.83
March	33,335	6,300	14,714	3.67	4.33
April	25,996	5,755	12,050	3.01	3.36
May	11,122	3,850	5,129	1.28	1.48
June	35,242	4,000	14,154	3.53	3.94
July	19,765	4,000	7,589	1.89	2.18
August	5,580	2,725	3,488	.87	1.00
September	20,971	1,980	3,960	.99	1.10
October	10,519	2,010	3,408	.85	.98
November	21,775	2,600	5,488	1.36	1.52
December	14,740	3,400	7,096	1.77	2.04
The year	53,332	1,980	8,218	2.05	27.73
1901					
January	52,980	4,600	15,450	3.86	4 45
February	35,845	4,900	12,186	3.04	3.17
March	52,980	4,600	13,406	3.34	3.85
April	36,046	6,901	15,578	3.88	4.33
May	51,724	4,150	12,533	3.12	3.60
June	19,966	4,450	8,316	2.08	2.32
July	9,715	2,850	4,441	1.10	1.27
August	45,292	2,850	13,780	3.44	3.97
September	21,172	3,120	6,389	1.59	1.77
October	5,230	2,350	3,414	.85	.98
November	2,850	2,110	2,316	.58	.65
December	64,186	2,475	13,428	3.35	3.86
The year	64,186	2,110	10,103	2.52	34.22
1902					
January	54,940	4,450	11,816	2.95	3.40
February	46,900	6,300	14,812	3.70	3.85
March	56,749	7,102	21,957	5.48	6.32
April	41,473	4,750	10,015	2.50	2.79
May	6,115	3,120	4,089	1.02	1.18
June	3,400	2,110	2,836	.71	.79
July	3,400	1,635	2,214	.55	.63
August	2,985	1,480	1,998	.50	.58
September	6,790	1,480	2,505	.63	.70
October	3,850	1,410	2,346	.59	.68
November	8,308	1,410	2,572	.64	.71
December	12,328	2,225	5,885	1.47	1.69
The year	56,749	1,410	6,920	1.73	23.32
1903					
January	8,710	3,620	5,442	1.36	1.57
February	56,347	4,795	25,376	6.34	6.60
March	56,146	9,313	27,111	6.78	7.82
April	48,709	6,225	15,788	3.95	4.41
May	12,127	3,620	5,278	1.32	1.52
June	35,031	3,910	9,594	2.40	2.68
July	20,971	3,340	5,616	1.40	1.61
August	11,122	2,530	4,472	1.12	1.29
September	3,620	1,510	2,002	.50	.56
October	3,060	1,280	2,002	.50	.58
November	3,620	1,880	2,512	.63	.70
December	2,660	1,750	1,985	.50	.58
The year	56,347	1,280	8,932	2.23	29.92

OOSTANAULA RIVER AT RESACA.

This station is located at the bridge of the Western and Atlantic Railway, in the town of Resaca, 800 feet south of the depot. It is a United States Weather Bureau station at which the gage readings are maintained for half the year only. During the years 1896 to 1898, inclusive, the United States Geological Survey maintained the gage for the other half of the year, making the gage height record complete, but for other years only the half-year records of the Weather Bureau are available. No estimates of discharge were made from 1901 until the beginning of 1905, when the station was reestablished.

The channel is slightly curved, the same curve extending about 300 feet above and below the bridge. The current is moderate, becoming rather sluggish at low water. The right bank is rock at the edge of the water, and has a solid stone abutment and railroad embankment above high-water level. The left bank is low, cultivated, and overflows during high water 480 feet to the end of the trestle. The bed of the stream is composed of rock near the right bank, but other parts appear to be sandy; to the left of the pier it is nearly filled up with logs and brush. There is one channel, broken by one pier at ordinary water.

Discharge measurements are made from the downstream side of the iron bridge, which consists of three spans of 120 feet each, and 480 feet of trestle approach at the left bank. The left span of the bridge is entirely outside of the river, except at high water. Measurements are also made from a boat at the ferry about 200 feet above the bridge, where the section is somewhat better. The initial point for soundings is the end of the bridge at the right bank, downstream side.

Gage heights are observed from the United States Weather Bureau gage, which is a heavy timber attached vertically to the downstream side of the center pier of the bridge. Bench marks were established as follows: (1) The top of the downstream end of the second crossbeam from the right bank; elevation, 38.94 feet. (2) A cross mark on the top of the limestone bowlder on the north side of the river, about 130 feet from the end of the railroad bridge and 40 feet west of the railroad track; elevation, 34.23 feet. Elevations refer to the datum of the gage.

Discharge measurements of Oostanaula River at Resaca.

Date	Gage height	Discharge	Date	Gage height	Discharge
1896	*Feet*	*Sec.-ft.*	1900	*Feet*	*Sec.-ft.*
July 27	2.90	1,133	April 30	3.00	5,118
August 19	1.47	492	May 15	3.60	1,466
October 13	1.70	601	May 25	3.75	1,539
1897			December 11	4.30	1,919
May 25	3.48	1,535	1904		
May 29	3.26	1,389	September 26a	.95	273
June 23	2.44	972	November 25a	1.57	427
September 23	1.20	406	December 21	1.79	389
November 14	1.46	510	1905		
December 24	7.10	4,642	March 14	5.10	2,521
December 30	3.42	1,630	June 7	3.30	1,339
1898			September 26	1.91	596
May 21	2.65	1,100	1906		
July 29	5.41	2,567	January 2	4.60	2,170
August 20	3.79	1,811	May 22	3.42	1,510
August 27	4.65	2,397	June 6	5.51	3,060
1899			June 28	4.37	2,120
April 26	8.05	5,146	July 26	5.97	3,290
May 20	4.15	1,671			
June 9	3.10	1,171			
June 21	3.05	1,087			
October 14	1.75	644			

a Made at different sections.

Daily gage height, in feet, of Oostanaula River at Resaca.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1896												
1	5.5	3.9	3.7	4.8	.....	.....	.....	2.1	1.2	6.5	1.5	9.25
2	4.6	3.9	3.7	11.8	.....	.....	.....	2.3	1.25	3.7	1.4	6.7
3	4.2	4.6	3.7	11.6	.....	.....	.....	2.65	1.2	2.05	1.4	4.6
4	3.8	4.8	3.6	11.7	.....	.....	.....	2.4	1.25	1.65	1.35	3.95
5	3.4	4.5	3.5	6.6	.....	.....	.....	2.15	1.15	1.5	1.9	3.5
6	3.0	10.7	3.4	5.4	.....	.....	.....	2.0	1.15	1.4	3.15	3.2
7	2.9	16.7	3.8	5.0	.....	.....	.....	1.9	1.3	1.3	2.1	3.0
8	3.3	15.5	4.2	4.9	.....	.....	.....	1.8	1.1	1.3	2.0	2.9
9	4.0	15.9	3.9	4.8	.....	.....	.....	1.75	1.1	1.3	2.1	3.0
10	4.0	14.1	3.6	4.3	.....	.....	.....	1.75	1.05	1.2	1.85	3.5
11	3.5	9.3	3.4	4.2	.....	.....	.....	1.65	1.0	1.2	1.7	3.3
12	3.4	6.9	4.5	4.0	.....	.....	.....	1.65	1.0	1.2	3.0	3.1
13	3.3	5.0	4.9	3.8	.....	.....	.....	1.7	1.5	1.55	13.65	2.9
14	3.1	9.1	4.0	3.7	.....	.....	.....	1.6	1.25	1.65	11.35	2.8
15	3.0	9.7	3.7	3.6	.....	.....	.....	1.6	1.1	1.5	11.1	4.2
16	2.9	7.8	3.6	3.6	.....	.....	.....	1.7	1.05	1.45	4.25	3.9
17	3.7	6.4	6.5	3.6	.....	.....	.....	1.7	1.0	1.35	3.3	3.3
18	4.0	5.7	8.4	3.5	.....	.....	.....	1.7	1.0	1.3	3.0	3.0
19	3.8	5.3	6.6	3.5	.....	.....	.....	1.5	.95	1.2	2.7	3.0
20	3.4	5.0	7.8	3.4	.....	.....	.....	1.35	.9	1.15	2.6	2.9
21	3.2	4.7	7.1	3.3	.....	.....	.....	1.3	.9	1.15	2.5	2.8
22	3.4	4.3	5.8	3.2	.....	.....	.....	1.25	.85	1.2	2.35	2.6
23	5.7	4.1	5.2	3.3	.....	.....	.....	1.2	1.95	1.2	2.4	2.55
24	10.8	4.0	4.9	4.2	.....	.....	.....	1.5	1.55	1.35	2.35	2.55
25	11.5	4.0	5.3	3.7	.....	.....	.....	3.2	1.25	1.9	2.25	2.4
26	10.0	3.9	5.0	3.3	.....	.....	.....	2.8	1.2	1.6	2.2	2.3
27	6.2	3.8	4.7	3.1	.....	.....	.....	1.95	1.1	1.5	2.1	2.25
28	5.2	3.7	4.4	3.4	.....	.....	.....	1.7	1.1	1.4	2.15	2.2
29	4.7	3.7	4.2	3.4	.....	.....	.....	1.5	1.7	1.95	3.8	2.2
30	4.3	.....	4.0	3.3	.....	.....	.....	1.4	8.35	1.55	8.7	2.2
31	4.0	.....	4.6	3.1	.....	.....	.....	1.3	.....	.....	.....	2.2
1897												
1	2.2	3.8	4.6	7.3	5.4	4.25	2.6	2.45	2.3	1.0	1.35	1.85
2	2.2	13.9	4.4	11.4	5.05	3.5	2.25	2.3	1.9	1.05	2.05	1.65
3	2.2	14.0	4.2	12.4	4.6	3.5	2.2	3.0	1.9	1.05	2.3	2.0
4	2.2	13.2	4.3	12.5	4.4	3.65	2.15	2.4	1.8	.95	2.1	4.65
5	3.0	8.7	5.9	18.5	4.25	3.35	2.2	2.5	1.8	.95	1.9	5.1
6	3.05	6.2	10.5	20.3	4.1	3.15	2.55	3.15	1.6	1.05	1.75	5.7
7	2.75	7.3	18.0	19.6	4.0	3.0	6.2	4.0	1.5	1.1	1.65	4.3
8	2.5	7.6	18.8	16.3	3.95	2.9	3.6	3.45	1.45	1.05	1.55	3.1
9	2.4	7.0	19.0	10.1	3.85	3.0	2.8	2.85	1.4	1.05	1.55	2.6
10	2.3	6.0	16.2	10.4	3.85	3.15	2.8	2.5	1.4	1.05	1.55	2.35
11	2.25	5.8	10.7	8.6	3.95	2.9	3.25	3.2	1.4	1.1	1.55	2.2
12	2.25	8.6	16.5	7.6	4.9	2.75	3.3	2.75	1.4	2.05	1.5	2.2
13	2.25	9.8	21.7	6.8	5.45	2.7	2.9	2.5	1.35	3.0	1.45	2.1
14	5.45	7.7	21.7	6.4	8.45	2.6	2.65	2.15	1.3	1.8	1.45	4.15
15	7.5	6.4	24.6	6.8	8.75	2.55	2.3	2.1	1.3	1.6	1.45	5.3
16	5.1	5.7	26.0	8.2	5.7	2.6	2.15	2.1	1.3	1.45	1.4	4.45
17	4.1	5.4	25.3	7.0	4.7	2.7	3.1	2.55	1.3	1.35	1.4	3.4
18	5.4	4.7	23.8	6.2	4.4	2.9	2.9	3.0	1.4	1.2	1.45	2.9
19	5.2	4.5	21.3	5.8	4.1	2.75	3.4	2.2	1.25	1.15	1.45	2.75
20	4.4	4.5	18.9	5.5	3.95	2.6	11.8	2.1	1.2	2.15	1.4	5.25
21	9.6	5.0	18.2	5.3	3.85	2.6	7.85	2.0	1.15	2.05	1.4	6.2
22	8.7	4.6	18.4	5.1	3.8	2.45	9.0	2.2	1.15	2.0	1.4	8.45
23	6.1	11.4	17.5	4.9	3.75	2.35	7.2	2.6	1.15	1.8	1.4	9.25
24	5.0	12.0	12.7	4.8	3.6	2.35	4.2	2.5	1.15	1.75	1.45	7.5
25	4.4	10.6	8.4	4.8	3.5	2.45	3.25	2.2	1.15	1.5	1.4	4.95
26	4.0	6.7	7.6	4.7	3.35	2.45	4.05	2.05	1.15	1.4	1.4	4.45
27	3.7	5.7	6.7	4.7	3.3	2.3	4.4	2.0	1.15	1.35	1.55	4.9
28	3.4	5.1	6.6	4.6	3.25	2.25	3.9	1.85	1.1	1.35	1.8	4.25
29	2.7	.....	6.0	4.4	3.25	3.5	3.2	1.75	1.2	1.35	1.75	3.75
30	3.1	.....	6.0	4.3	3.15	2.9	2.8	1.7	1.0	1.3	1.75	3.4
31	3.5	.....	6.0	.....	3.5	.....	2.55	1.85	.....	1.3	.....	3.2

Daily gage height, in feet, of Oostanaula River at Resaca—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1898												
1	3.1	5.15	3.1	10.05	4.5	2.65	1.9	5.9	2.65	2.7	3.65	5.3
2	2.95	4.6	2.9	7.0	4.25	2.3	2.0	4.9	12.8	2.55	3.5	4.8
3	2.7	4.2	3.0	5.7	4.1	2.25	1.9	3.8	19.1	2.5	3.5	4.5
4	2.6	3.9	3.1	5.05	3.9	2.2	1.75	3.8	21.0	6.65	3.5	4.6
5	2.6	3.8	3.05	11.95	3.8	2.1	1.7	7.0	21.0	18.7	3.4	6.6
6	2.6	3.8	2.9	17.7	3.65	2.0	2.2	4.3	19.2	22.0	3.45	6.2
7	2.8	3.8	2.75	15.1	3.55	2.0	2.5	4.1	17.1	23.3	3.8	5.4
8	3.0	3.7	2.7	12.1	3.55	1.9	4.75	3.7	11.6	21.75	3.9	4.9
9	2.85	3.55	2.65	9.75	3.4	1.9	2.9	3.4	7.0	16.7	3.55	4.6
10	2.75	3.45	2.65	5.85	3.35	1.85	3.2	3.7	5.4	6.9	3.4	4.3
11	2.7	3.4	2.65	5.45	3.2	1.85	2.9	7.15	5.0	5.65	3.7	4.2
12	6.85	3.3	2.6	5.5	3.2	1.75	2.6	6.7	4.6	5.15	3.7	4.0
13	6.7	3.3	2.6	5.0	3.1	2.4	2.1	5.4	4.4	4.7	3.7	4.0
14	6.85	3.15	2.7	5.1	3.1	3.5	2.2	4.75	3.95	4.55	4.4	4.0
15	5.85	3.1	4.1	5.5	3.05	2.8	3.4	3.85	3.8	4.3	4.15	3.7
16	6.3	3.05	8.15	5.3	2.9	2.4	3.7	3.4	3.7	4.1	4.85	3.6
17	6.5	2.9	9.4	5.0	2.85	2.5	2.75	4.0	3.5	4.0	4.1	3.6
18	5.1	2.9	5.95	4.6	2.8	3.85	2.4	3.2	3.35	8.0	4.4	3.7
19	4.7	3.0	5.35	4.45	2.75	4.0	2.1	4.3	3.2	9.5	6.75	3.7
20	8.9	3.0	4.6	5.6	2.75	5.3	2.0	4.0	3.1	6.3	7.15	4.7
21	10.65	3.0	4.1	5.65	2.6	5.0	1.9	3.35	3.0	5.0	6.0	5.5
22	9.0	2.95	3.85	4.55	2.6	4.45	1.75	5.3	3.0	5.0	5.15	4.9
23	7.3	2.9	3.6	4.2	2.5	3.9	1.9	3.5	5.35	5.85	7.8	5.0
24	7.05	2.8	3.45	10.6	2.55	2.65	1.8	2.95	4.7	4.9	7.1	5.3
25	8.8	2.8	3.55	9.4	3.0	2.4	2.2	2.9	4.4	4.4	5.95	4 55
26	17.1	2.7	3.95	7.15	2.7	2.2	3.2	3.45	4.3	4.25	5.1	4.25
27	16.0	3.0	3.5	6.5	2.5	2.2	3.4	4.65	3.0	4.4	4.8	4.1
28	13.65	3.25	3.3	5.9	2.35	2.3	5.3	3.75	2.9	4.2	4.4	4.0
29	8.2	.....	6.0	5.3	2.3	2.1	5.25	2.8	2.8	4.0	4.6	3.85
30	6.05	.....	11.85	4.9	2.25	2.0	4.2	2 6	2.7	3.9	5.6	3.8
31	5.5	.....	12.5	.....	2.25	.....	5.2	2.65	.....	3.8	.....	3.8
1899												
1	5.1	11.0	16.2	13.4	.....	.....	.....	.....	.....	.....	1.8	2.3
2	5.0	8.8	9.6	10.3	.....	.....	.....	.....	.....	.....	1.7	2.5
3	4.5	7.95	8.0	8.4	.....	.....	.....	.....	.....	.....	1.7	2.6
4	4.2	16.0	7.4	8.1	.....	.....	.....	.....	.....	.....	1.7	2.3
5	4.1	19.9	9.3	10.2	.....	.....	.....	.....	.....	.....	1.7	2.2
6	4.5	21.9	10.4	9.0	.....	.....	.....	.....	.....	.....	1.7	2.1
7	7.5	25.5	9.4	8.9	.....	.....	.....	.....	.....	.....	1.6	2.0
8	9.35	26.5	7.5	14.3	.....	.....	.....	.....	.....	.....	1.6	2.0
9	8.8	25.3	6.8	13.9	.....	.....	.....	.....	.....	.....	1.6	1.9
10	6.2	22.2	6.6	12.7	.....	.....	.....	.....	.....	.....	1.6	2.0
11	5.85	15.8	6.4	8.9	.....	.....	.....	.....	.....	.....	1.6	2.1
12	6.0	8.2	6.1	7.8	.....	.....	.....	.....	.....	.....	1.7	5.1
13	5.8	7.0	6.0	7.4	.....	.....	.....	.....	.....	.....	1.7	8.0
14	5.3	6.35	8.0	7.0	.....	.....	.....	.....	.....	.....	1.7	6.4
15	5.5	6.7	16.0	6.8	.....	.....	.....	.....	.....	.....	1.6	4.0
16	5.15	6.7	22.0	6.5	.....	.....	.....	.....	.....	.....	1.9	3.6
17	6.1	12.1	28.6	6.2	.....	.....	.....	.....	.....	.....	2.0	3.3
18	6.25	11.4	27.3	6.0	.....	.....	.....	.....	.....	.....	1.8	2.8
19	5.65	10.2	26.6	6.1	.....	.....	.....	.....	.....	.....	1.8	2.7
20	5.1	9.55	26.2	6.0	.....	.....	.....	.....	.....	.....	1.8	3.5
21	4.85	8.1	27.3	5.8	.....	.....	.....	.....	.....	.....	1.7	4.4
22	4.7	8.2	25.2	5.6	.....	.....	.....	.....	.....	.....	1.7	3.6
23	4.5	8.65	21.1	5.4	.....	.....	.....	.....	.....	.....	2.3	3.3
24	4.55	7.7	17.0	6.4	.....	.....	.....	.....	.....	.....	2.8	3.1
25	5.5	6.9	11.0	8.6	.....	.....	.....	.....	.....	.....	2.3	3.1
26	5.3	6.4	9.0	8.7	.....	.....	.....	.....	.....	.....	2.7	6.0
27	4.8	17.5	8.6	7.0	.....	.....	.....	.....	.....	.....	3.8	4.3
28	4.55	20.2	7.9	6.3	.....	.....	.....	.....	.....	.....	3.4	3.8
29	4.4	.....	11.65	5.8	.....	.....	.....	.....	.....	.....	2.8	3.7
30	4.2	.....	11.4	5.5	.....	.....	.....	.....	.....	.....	2.5	3.5
31	6.1	.....	11.4	.....	.....	.....	.....	.....	.....	.....	.....	3.0

Daily gage height, in feet, of Oostanaula River at Resaca—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900												
1	(a)	3.1	6.0	5.8	6.8	3.3	.....	.....	.....	.....	2.8	4.5
2	(a)	3.0	7.3	5.4	5.7	3.5	.....	.....	.....	.....	2.9	4.2
3	(a)	3.0	6.8	5.3	5.5	4.0	.....	.....	.....	.....	3.0	4.0
4	(a)	3.1	5.9	5.6	5.3	5.5	.....	.....	.....	.....	4.6	6.0
5	(a)	4.3	5.4	6.3	4.8	5.0	.....	.....	.....	.....	4.5	8.6
6	(a)	4.2	5.1	6.0	4.6	7.7	.....	.....	.....	.....	3.7	6.3
7	2.7	3.7	6.9	5.2	4.4	7.9	.....	.....	.....	.....	3.5	8.0
8	2.6	3.5	11.3	5.0	4.0	13.0	.....	.....	.....	.....	3.0	5.6
9	2.4	5.6	15.5	4.8	3.9	10.8	.....	.....	.....	.....	2.9	5.0
10	2.5	9.1	14.2	4.6	3.8	7.5	.....	.....	.....	.....	2.8	4.8
11	4.2	7.3	11.1	7.2	3.7	5.6	.....	.....	.....	.....	2.8	4.2
12	11.3	7.8	7.6	11.6	3.6	5.8	.....	.....	.....	.....	2.8	4.0
13	11.3	20.3	6.7	9.8	3.6	6.8	.....	.....	.....	.....	2.7	4.0
14	9.9	23.0	6.0	7.4	3.4	6.6	.....	.....	.....	.....	2.7	4.0
15	6.1	23.5	5.6	6.2.	3.4	5.6	.....	.....	.....	.....	2.7	4.0
16	4.9	20.8	7.3	5.8	3.4	4.8	.....	.....	.....	.....	2.7	3.9
17	4.3	13.7	6.9	6.8	3.3	6.6	.....	.....	.....	.....	2.6	3.5
18	4.1	6.5	5.9	11.9	3.3	6.8	.....	.....	.....	.....	2.6	3.4
19	6.1	5.5	6.0	12.0	3.8	10.9	.....	.....	.....	.....	2.6	3.4
20	13.1	5.2	16.9	10.4	3.9	7.0	.....	.....	.....	.....	2.7	3.8
21	12.1	5.8	17.2	11.8	3.8	6.5	.....	.....	.....	.....	2.8	10.9
22	10.2	9.1	13.8	11.6	3.7	4.8	.....	.....	.....	.....	3.6	9.3
23	6.0	8.9	8.8	9.7	3.6	9.9	.....	.....	.....	.....	3.4	6.8
24	5.2	7.3	7.7	7.7	3.7	12.8	.....	.....	.....	.....	3.3	9.0
25	4.8	7.0	8.0	7.2	3.8	14.0	.....	.....	.....	.....	3.7	8.7
26	4.4	6.7	12.2	6.2	4.0	15.0	.....	.....	.....	.....	14.4	6.7
27	4.0	6.0	10.8	5.8	4.0	17.2	.....	.....	.....	.....	13.0	5.6
28	3.7	5.5	8.3	5.6	3.7	17.5	.....	.....	.....	.....	12.2	4.6
29	3.6	.....	7.2	5.5	3.6	13.0	.....	.....	.....	.....	7.6	5.4
30	3.5	.....	6.6	7.8	3.6	9.6	.....	.....	.....	.....	5.2	5.2
31	3.4	.....	6.2	.....	3.4	.....	.....	.....	.....	.....	.....	7.7

a Frozen

Day	Jan.	Feb.	Mar.	Apr.	Nov.	Dec.	Day	Jan.	Feb.	Mar.	Apr.	Nov.	Dec.
1901							1901						
1	9.4	8.4	4.0	8.3	.....	2.9	17	8.9	5.8	5.0	6.8	2.9	22.8
2	7.6	6.9	4.0	9.3	.....	2.8	18	6.8	5.6	4.8	6.4	2.8	20 0
3	6.0	6.4	4.0	14.2	.....	3.2	19	6.0	5.4	4.7	12.8	2.9	9.6
4	5.6	15.7	4.0	13.2	.....	4.2	20	5.8	5.4	4.7	19.8	3.3	5.3
5	5.0	16.1	4.0	11.7	.....	4.0	21	5.4	5.2	5.2	20.8	3.4	4.8
6	4.6	12.7	4.4	8.3	.....	3.5	22	5.4	5.0	5.0	20.7	3.3	4.1
7	4.0	8.4	4.5	7.6	.....	3.6	23	5.2	4.8	4.8	18.0	3.0	4.3
8	4.0	7.2	4.2	6.8	.....	3.4	24	6.0	4.8	5.2	9.6	3.9	6.1
9	4.0	12.2	4.4	6.4	.....	3.4	25	9.1	4.6	5.8	7.7	3.7	6.0
10	4.0	13.4	9.2	6.2	.....	4.0	26	7.8	4.5	21.2	6.9	3.5	5.4
11	11.6	9.0	12.0	5.7	.....	4.5	27	6.4	4.4	25.4	6.6	3.2	8.9
12	21.8	8.0	10.9	5.6	.....	4.3	28	6.8	4.3	25.8	6.2	3.1	10.2
13	25.7	7.2	8.4	5.6	3.3	3.9	29	6.4	.....	23.2	6.0	3.0	19.3
14	26.7	6.6	6.2	11.6	3.0	4.0	30	6.7	.....	17.2	5.8	2.9	23.8
15	24.0	6.4	5.6	10.6	3.1	19.7	31	9.7	.....	9.6	.....	.....	26.6
16	18.8	5.9	5.2	7.9	3.0	22.4							

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	3.6	3.4	5.4	4.0	3.2	4.2	6.0	2.6	2.0	1.9	2.2	2.4
2	3.0	3.2	5.2	4.0	5.8	4.0	5.6	2.3	3.2	1.9	2.1	2.5
3	2.6	3.0	5.0	4.0	5.0	3.8	4.4	2.0	3.6	1.95	2.1	14.1
4	3.0	3.0	4.5	3.8	5.8	3.8	3.6	1.8	2.6	2.8	2.1	13.8
5	4.0	3.2	4.2	4.2	5.6	3.6	3.2	1.6	2.8	3.1	2.1	9.6

Daily gage height, in feet, of Oostanaula River at Resaca—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
6	3.6	6.5	4.8	4.8	5.2	3.6	3.0	1.8	2.4	2.7	2.1	5.4
7	4.6	9.0	4.5	4.6	4.8	3.4	3.4	2.0	2.2	2.1	2.1	4.6
8	5.4	9.5	4.5	4.4	4.6	3.4	3.6	2.8	2.0	2.0	2.2	8.6
9	4.0	18.0	4.5	4.4	6.4	3.6	3.6	6.0	1.8	1.9	2.2	17.4
10	3.8	19.8	7.6	3.8	5.8	3.2	4.8	4.6	1.8	1.9	2.2	18.2
11	3.8	18.5	8.6	3.8	5.2	3.0	5.0	4.2	1.6	3.1	2.2	12.4
12	9.0	17.0	7.0	4.0	4.8	2.8	7.4	4.6	5.0	5.2	2.2	7.6
13	14.2	13.0	6.8	4.0	4.2	3.2	8.8	7.6	4.0	3.7	2.1	5.4
14	20.2	12.0	5.2	3.8	3.8	3.0	5.8	4.2	3.4	2.9	2.1	5.1
15	13.2	10.0	5.0	4.2	3.6	2.8	4.0	6.2	2.8	2.6	2.0	7.4
16	6.0	7.5	4.7	5.0	10.3	2.8	3.8	6.8	2.2	2.9	2.1	8.6
17	5.0	6.5	4.6	4.8	9.6	3.0	4.0	8.8	2.2	2.9	2.1	7.4
18	4.6	6.0	4.5	4.6	8.0	3.2	3.6	5.4	2.0	2.75	2.1	5.9
19	4.2	5.8	4.2	4.6	6.3	3.8	3.2	4.7	1.8	2.4	2.1	5.2
20	4.8	10.2	4.3	4.4	5.2	3.2	3.0	3.8	1.8	2.3	2.2	5.4
21	4.2	20.2	8.5	3.8	4.6	3.2	3.0	3.4	1.8	2.2	3.0	12.8
22	4.0	22.0	9.2	4.0	4.6	4.0	3.0	2.8	1.8	2.1	2.4	12.4
23	4.0	20.6	6.5	4.0	5.2	6.0	3.0	2.8	1.8	2.1	2.2	11.4
24	3.5	18.6	5.5	3.8	14.0	5.0	2.8	3.0	1.8	2.0	2.2	10.0
25	3.5	8.6	5.2	3.6	11.0	3.8	2.8	4.0	1.8	2.1	2.3	9.6
26	3.4	7.2	4.6	3.6	8.6	3.4	2.8	3.8	1.9	2.4	2.9	7.6
27	3.2	6.5	4.6	4.0	6.8	3.2	2.4	3.4	1.9	2.9	2.5	6.4
28	3.2	6.0	4.4	6.6	5.4	5.2	2.4	2.8	1.85	2.7	2.3	5.6
29	3.0	.....	4.2	6.2	5.0	4.2	4.0	2.6	1.85	2.4	2.3	6.1
30	3.2	.....	4.2	9.2	4.6	4.2	3.0	2.4	1.85	2.4	2.5	5.9
31	3.5	.....	4.0	.....	4.6	.....	2.8	2.2	.....	2.4	.....	5.2
1906												
1	4.8	6.6	3.8	11.8	4.6	3.6	3.8	6.3	9.6	17.3	4.0	4.2
2	4.6	6.4	3.8	8.8	4.4	3.6	3.8	7.6	8.3	17.6	4.0	4.0
3	8.6	5.8	6.8	7.6	4.4	4.6	3.6	5.9	5.0	18.1	4.0	3.8
4	17.5	5.4	10.6	6.6	7.0	4.2	3.6	6.4	5.0	17.8	3.9	3.8
5	17.6	5.0	9.2	6.2	5.4	4.2	3.4	8.6	4.6	15.9	3.9	3.6
6	13.6	5.2	6.2	6.2	5.0	6.6	3.4	7.4	4.8	12.6	3.9	3.8
7	7.6	5.0	5.4	6.0	6.0	4.6	3.4	7.9	4.9	11.0	3.8	4.6
8	6.4	4.8	5.8	5.8	5.4	4.0	3.2	6.0	4.5	10.7	3.8	4.6
9	7.2	4.8	6.2	5.6	5.2	3.8	3.2	5.2	5.9	8.2	3.7	4.8
10	6.8	4.8	5.4	8.6	4.8	3.8	3.4	4.9	4.9	6.6	3.7	6.4
11	6.2	4.6	4.0	7.0	4.6	3.6	3.4	5.2	4.9	6.0	3.6	8.6
12	6.8	4.2	4.8	6.2	4.2	3.8	3.2	4.5	7.2	5.6	3.6	7.3
13	6.2	4.2	4.6	5.8	4.2	10.6	3.2	4.4	7.5	5.2	3.6	6.4
14	5.9	4.2	4.4	5.2	4.0	17.5	3.6	8.6	6.5	5.0	3.5	5.8
15	6.0	4.2	19.1	6.6	4.0	17.0	9.0	5.0	4.8	4.8	4.4	4.6
16	5.6	4.0	21.8	6.4	4.0	15.6	8.6	7.5	4.3	4.7	4.4	4.2
17	6.2	4.0	20.8	5.6	3.9	13.2	9.8	6.2	4.0	4.6	4.8	4.6
18	5.6	4.0	13.4	5.2	3.8	7.6	14.6	5.2	3.8	9.4	7.8	8.6
19	5.6	3.8	13.4	5.0	3.8	6.0	15.4	5.8	6.6	13.8	23.0	9.6
20	5.4	3.8	19.6	4.8	3.8	5.2	16.4	5.1	7.5	11.5	29.0	8.4
21	5.2	3.8	17.2	4.8	3.6	5.0	14.6	5.1	6.9	7.4	30.0	7.6
22	10.2	5.0	12.4	4.4	3.6	4.6	10.0	4.6	6.2	5.8	27.8	6.6
23	17.2	4.2	8.2	4.4	3.4	4.4	12.2	4.9	6.2	5.4	24.0	6.4
24	17.4	4.2	7.4	4.4	3.2	4.8	11.0	4.8	6.4	5.1	16.0	6.4
25	11.4	4.0	6.6	4.4	3.2	5.8	8.6	5.2	6.0	4.9	7.6	6.8
26	8.4	4.0	6.2	4.4	3.2	5.0	6.0	4.9	5.2	4.7	5.8	6.6
27	8.2	3.8	6.7	4.4	6.4	4.6	5.4	5.8	4.7	4.6	5.4	6.3
28	9.2	3.8	8.2	5.6	4.4	4.0	5.0	5.1	4.4	4.4	4.9	6.0
29	8.2	.....	9.2	5.4	4.0	3.8	5.8	4.8	4.3	4.3	4.7	6.0
30	7.8	.....	10.8	5.2	4.0	3.8	8.1	5.9	6.3	4.2	4.5	7.5
31	7.8	.....	13.8	.....	3.8	.....	7.4	7.8	.....	4.2	.....	14.2

Rating tables for Oostanaula River at Resaca.

JANUARY 1, 1896, TO DECEMBER 31, 1897.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.80	304	2.60	1,025	4.40	2,340	7.40	4,890
.90	326	2.70	1,079	4.50	2,425	7.60	5,060
1.00	350	2.80	1,134	4.60	2,510	7.80	5,230
1.10	378	2.90	1,191	4.70	2,595	8.00	5,400
1.20	408	3.00	1,250	4.80	2,680	9.00	6,300
1.30	440	3.10	1,312	4.90	2,765	10.00	7,200
1.40	475	3.20	1,377	5.00	2,850	11.00	8,100
1.50	512	3.30	1,444	5.20	3,020	12.00	9,000
1.60	552	3.40	1,514	5.40	3,190	13.00	9,900
1.70	594	3.50	1,588	5.60	3,360	14.00	10,800
1.80	637	3.60	1,665	5.80	3,530	15.00	11,700
1.90	681	3.70	1,745	6.00	3,700	16.00	12,600
2.00	727	3.80	1,830	6.20	3 870	18.00	14,400
2.10	774	3.90	1,915	6.40	4,040	20.00	16,200
2.20	822	4.00	2,000	6.60	4,210	22.00	18,000
2.30	871	4.10	2,085	6.80	4,380	24.00	19,800
2.40	921	4.20	2,170	7.00	4,550	26.00	21,600
2.50	972	4.30	2,255	7.20	4,720		

JANUARY 1 TO DECEMBER 31, 1898.[b]

1.70	594	3.30	1,425	4.90	2,500	7.80	5,430
1.80	637	3.40	1,485	5.00	2,585	8.00	5,650
1.90	681	3.50	1,550	5.20	2,765	8.50	6,200
2.00	727	3.60	1,615	5.40	2,955	9.00	6,750
2.10	774	3.70	1,680	5.60	3.140	9.50	7,300
2.20	823	3.80	1,745	5.80	3,335	10.00	7,850
2.30	873	3.90	1,810	6.00	3,525	11.00	8,950
2.40	924	4.00	1,875	6.20	3,715	12.00	10,050
2.50	976	4.10	1,940	6.40	3,910	13.00	11.150
2.60	1,030	4.20	2,005	6.60	4,110	14.00	12,250
2.70	1,085	4.30	2,070	6.80	4,330	15.00	13,350
2.80	1,140	4.40	2,135	7.00	4,550	17.00	15,550
2.90	1,195	4.50	2,205	7.20	4,770	19.00	17,750
3.00	1,250	4.60	2,275	7.40	4,990	21.00	19,950
3.10	1,305	4.70	2,345	7.60	5,210	23.00	22,150
3.20	1,365	4.80	2,420				

a Above gage height 8.00 feet the rating curve is a tangent, the difference being 90 per tenth.
b Above gage height 7.00 feet the rating curve is a tangent, the difference being 110 per tenth.

JANUARY 1 TO DECEMBER 31, 1899.[c]

1.60	600	3.40	1,275	5.40	2,690	9.00	5,990
1.70	625	3.50	1,325	5.60	2,870	9.50	6,450
1.80	650	3.60	1,380	5.80	3,050	10.00	6,911
1.90	675	3.70	1,435	6.00	3,230	10.50	7,370
2.00	705	3.80	1,490	6.20	3,414	11.00	7,830
2.10	735	3.90	1,550	6.40	3,598	11.50	8,290
2.20	770	4.00	1,610	6.60	3,782	12.00	8,750
2.30	805	4.10	1,670	6.80	3,966	13.00	9,670
2.40	840	4.20	1,730	7.00	4.150	14.00	10,590
2.50	880	4.30	1,795	7.20	4,334	15.00	11,510
2.60	920	4.40	1,860	7.40	4,518	17.00	13,350
2.70	960	4.50	1,930	7.60	4,702	19.00	15,190
2.80	1,000	4.60	2,005	7.80	4,886	21.00	17,030
2.90	1.040	4.70	2,080	8.00	5,070	23.00	18,870
3.00	1,080	4.80	2,160	8.20	5,254	25.00	20,710
3.10	1,125	4.90	2,240	8.40	5.438	27.00	22,550
3.20	1,175	5.00	2,330	8.60	5,622	29.00	24,390
3.30	1,225	5.20	2,510	8.80	5,806		

c Above gage height 6.00 feet the rating curve is a tangent, the difference being 92 per tenth.

Rating table for Oostanaula River at Resaca—Continued.

JANUARY 1, 1900, TO DECEMBER 31, 1901.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.40	840	3.20	1,220	4.00	1,700	4.70	2,150
2.50	880	3.30	1,280	4.10	1,760	4.80	2,220
2.60	920	3.40	1,340	4.20	1,820	4.90	2,290
2.70	960	3.50	1,400	4.30	1,880	5.00	2,360
2.80	1,000	3.60	1,460	4.40	1,940	5.10	2,440
2.90	1,050	3.70	1,520	4.50	2,010	5.20	2,520
3.00	1,100	3.80	1,580	4.60	2,080	5.30	2,600
3.10	1,160	3.90	1,640				

JANUARY 1 TO DECEMBER 31, 1905.[b]

1.60	455	3.20	1,275	4.70	2,250	7.40	4,320
1.70	495	3.30	1,335	4.80	2,320	7.60	4,480
1.80	540	3.40	1,395	4.90	2,390	7.80	4,640
1.90	585	3.50	1,455	5.00	2,460	8.00	4,800
2.00	630	3.60	1,520	5.20	2,600	8.20	4,980
2.10	680	3.70	1,585	5.40	2,750	8.40	5,160
2.20	730	3.80	1,650	5.60	2,900	8 60	5,340
2.30	780	3.90	1,715	5.80	3,050	8 80	5,520
2.40	830	4.00	1,780	6.00	3,200	9.00	5,700
2.50	880	4.10	1,845	6.20	3,360	9.20	5,880
2.60	935	4.20	1,910	6.40	3,520	9.40	6,060
2.70	990	4 30	1,975	6.60	3,680	9.60	6,240
2.80	1,045	4.40	2,040	6.80	3,840	9.80	6,420
2.90	1,100	4.50	2,110	7.00	4.000	10.00	6,600
3.00	1,155	4.60	2,180	7.20	4,160	11.00	7,500
3.10	1,215						

JANUARY 1 TO DECEMBER 31, 1906.[c]

3 20	1,290	4.60	2,230	6.00	3,340	8.80	6,060
3.30	1,350	4.70	2,305	6.20	3,520	9.00	6,230
3.40	1,410	4.80	2,380	6.40	3,700	10.00	7,420
3.50	1,475	4.90	2,455	6.60	3,880	11.00	8,640
3.60	1,540	5.00	2,530	6.80	4,060	12.00	9,980
3.70	1,605	5.10	2,610	7.00	4,250	13.00	11,280
3.80	1,670	5.20	2,690	7.20	4,450	14.00	12,630
3.90	1,735	5.30	2,770	7.40	4,650	15.00	14,120
4.00	1,800	5.40	2,850	7.60	4,850	16.00	15,600
4.10	1,870	5.50	2,930	7.80	5,050	17.00	17,100
4.20	1,940	5.60	3,010	8.00	5,250	18.00	18,600
4.30	2,010	5.70	3,090	8.20	5,450		
4.40	2,080	5.80	3,170	8.40	5,650		
4.50	2,155	5.90	3,250	8.60	5,850		

[a] Above gage height 5.3 feet this table is the same as the 1899 table.

[b] Above gage height 11.00 feet the rating curve is a tangent, the difference being 100 per tenth.

[c] This table is based on eleven discharge measurements made during 1904-1906 and is well defined below gage height 6 feet. Above gage height 16 feet the rating curve is a tangent, the difference being 150 per tenth

Estimated monthly discharge of Oostanaula River at Resaca.

[Drainage area, 1,614 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1896[a]					
January	8,550	1,191	2,526	1.56	1.80
February	13,280	1,745	4,855	2.82	3.04
March	5,760	1,514	2,598	1.61	1.86
April	8,820	1,312	2,610	1.62	1.87
August	1,377	408	655	.41	.47
September	5,717	315	584	.36	.40
October	4,125	393	652	.40	.47
November	10,480	458	1,920	1.19	1.33
December	6,525	822	1,546	.96	1.10

[a] The estimates for 1896 have been revised on the basis of the 1897 rating curve.

Estimated monthly discharge of Oostanaula River at Resaca—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1897					
January	6,760	822	2,097	1.30	1.50
February 5-22	10,800	2,425	5,081	3.15	3.28
March	21,600	2,170	10,740	6.65	7.67
April 11-30	16,470	2,255	5,933	3.68	4.11
May	6,040	1,344	2,340	1.45	1.67
June	2,212	846	1,198	.74	.83
July	8,600	798	2,004	1.24	1.43
August	2,000	594	969	.60	.69
September	871	350	479	.30	.33
October	1,250	338	506	.31	.36
November	871	475	551	.34	.38
December	6,460	575	2,233	1.38	1.59
The year	21,600	338	2,844	1.76	23.84
1898					
January	15,660	1,030	4,262	2.64	3.04
February	2,720	1,085	1,487	.92	.96
March	10,600	1,080	2,449	1.52	1.75
April	16,320	2,170	4,909	3.04	3.39
May	2,205	848	1,311	.81	.94
June	2,860	616	1,124	.69	.78
July	2,860	594	1,203	.74	.86
August	4,715	1,030	2,084	1.29	1.49
September	19,950	1,058	5,169	3.20	3.57
October	22,150	976	5,362	3.32	3.83
November	5,430	1,485	2,435	1.51	1.68
December	4,110	1,615	2,258	1.40	1.61
The year	22,150	594	2,838	1.76	23.89
1899					
January	6,312	1,670	2,777	1.72	1.98
February	22,090	3,552	9,627	5.96	6.21
March	24,022	3,230	10,416	6.45	7.44
April	10,866	2,690	5,163	3.20	3.57
November	1,491	600	735	.46	.52
December	5,162	675	1,683	1.04	1.20
1900					
January 7 to 31	9,762	840	3,362	2.08	1.93
February	19,330	1,100	5,470	3.39	3.53
March	13,534	2,430	5,760	3.57	4.11
April	8,750	2,060	4,530	2.81	3.13
May	3,966	1,280	1,760	1.09	1.26
June	13,810	1,280	5,583	3.46	3.86
November	10,958	920	2,207	1.37	1.53
December	7,738	1,340	3,059	1.90	2.19
1901					
January	22,274	1,700	6,222	3.86	4.45
February	12,522	1,880	4,655	2.88	3.00
March	21,446	1,700	5,597	3.47	4.00
April	16,846	2,870	6,699	4.15	4.63
November 13-30	1,640	1,000	1,211	.75	.50
December	22,182	1,000	5,958	3.69	4.25
1905					
January	16,700	935	2,876	1.78	2.05
February	18,500	1,155	7,512	4.65	4.84
March	5,880	1,780	2,756	1.71	1.97
April	5,880	1,520	2,123	1.32	1.47
May	10,500	1,520	3,476	2.15	2.48
June	3,200	1,045	1,572	.974	1.09
July	5,520	830	1,793	1.11	1.28
August	5,520	455	1,735	1.07	1.23
September	2,460	455	818	.507	.566
October	2,600	585	922	.571	.658
November	1,155	630	752	.466	.520
December	14,700	830	5,409	3.35	3.86
The year	18,500	455	2,645	1.64	22.01

Estimated monthly discharge of Oostanaula River at Resaca—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1906					
January	18,000	2,230	6,330	3.93	4.53
February	3,880	1,670	2,220	1.38	1.44
March	24,300	1,670	7,760	4.82	5.56
April	9,670	2,080	3,410	2.12	2.36
May	4,250	1,290	2,100	1.30	1.50
June	17,800	1,540	4,220	2.62	2.92
July	16,200	1,290	4,880	3.03	3.49
August	5,850	2,060	3,320	2.06	2.38
September	6,940	1,670	3,180	1.98	2.21
October	18,800	1,940	6,460	4.01	4.62
November	36,600	1,480	7,560	4.70	5.24
December	13,000	1,540	3,710	2.30	2.65
The year	36,600	1,290	4,600	2.86	38.90

NOTE.—Values are rated as follows: March and November good; remainder of 1906 excellent.

COOSAWATTEE RIVER AT CARTERS.

This river, which is formed by the junction of Ellijay and Cartecay rivers at Ellijay, flows in a southwesterly direction, joining the Conasauga to form the Oostanaula. Its drainage area is for the most part mountainous and covered with forest growth. The gaging station was established August 15, 1896, by M. R. Hall, at the iron highway bridge at Carters, Murray County, Ga. Carters is at the head of navigation, small boats running to Rome, Ga., and the Coosa River below. It is at the foot of the great shoals made by this stream in cutting through the Cohutta Mountains. The channel is curved for 1,000 feet above and 500 feet below the station. The current is swift and broken. Both banks are high, but overflow at flood stages. The bed of the stream is of gravel and is not liable to change. Discharge measurements are made from the single-span highway bridge and its approaches. The initial point for soundings is the land side of the pier on the right bank.

A standard chain gage is attached to the downstream side of the bridge in the third panel from the right bank; length of chain, 36.57 feet. The observer is R. P. Messer, who reads the gage once a day. Bench marks were established as follows: (1) The top of the cylindrical iron pier at the right bank, downstream side; elevation, 30.35 feet. (2) The top of a stone post set into the ground on the north side of the river, about 300 feet from the end of the iron bridge and on the west side of the road leading toward Carter's mill; elevation, 22.15 feet. Elevations refer to the datum of the gage.

A VIEW OF THE LOCKS OF THE AUGUSTA CANAL, LOOKING TOWARD THE CITY OF AUGUSTA.

Discharge measurements of Coosawattee River at Carters.

Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*
1896			1900		
August 15	0.90	320	November 17	1.87	458
August 17	.95	319	November 26	4.08	1,899
October 10	.55	228	December 22	2.70	1,132
1897			1901		
May 22	2.10	815	April 20	7.00	3,917
May 24	1.95	771	June 21	2.92	1,283
May 26	1.88	712	October 25	1.95	717
May 28	1.85	698	1902		
June 1	1.90	723	April 28	2.72	1,068
June 28	1.33	474	August 8	.95	313
July 15	1.50	544	November 4	.85	273
July 22	2.41	1,079	December 30	2.30	902
September 17	.70	251	1903		
September 27	.60	216	March 18	3.56	1,588
November 15	.77	243	July 22	2.35	963
November 24	.75	263	September 8	1.22	444
December 14	2.71	1,117	September 8	1.22	456
December 22	3.54	1,661	October 16	1.07	374
1898			December 31	1.26	416
January 26	5.70	3,052	1904		
March 18	1.80	697	March 15	2.60	1,045
March 30	5.87	3,079	May 26	1.80	427
March 30	5.35	2,782	June 26	.99	322
May 28	1.36	495	August 23	.85	312
June 25	1.12	385	September 27	.50	202
July 28	2.55	1,019	December 21	.82	275
August 25	1.77	686	December 28	.73	235
November 22	4.05	2,006	1905		
1899			March 18	2.10	848
January 28	2.14	868	March 28	2.21	917
March 14	8.95	5,240	June 6	1.77	694
March 14	7.70	4,682	September 28	1.02	361
May 26	2.35	906	December 30	2.39	942
June 22	1.75	653	December 30	2.39	951
October 19	1.10	377	1906		
1900			March 17	4.38	2,140
April 28	2.60	1,075	March 30	8.25	4,540
May 11	2.15	811	June 5	7.90	4,660
May 24	2.05	781			
August 13	1.58	576			
September 7	1.25	423			

Daily gage height, in feet, of Coosawattee River at Carters.

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Day	Aug.	Sept.	Oct.	Nov.	Dec.
1896						1896					
1		0.75	1.25	0.8	2.5	17	0.95	0.5	0.65	0.95	2.35
2		.75	1.1	.85	2.25	18	.9	.5	.6	.9	2.2
3		.75	1.0	1.0	2.0	19	.85	.45	.6	.9	2.05
4		.7	.95	1.05	2.0	20	.8	.5	.55	.9	2.0
5		.7	.95	3.1	1.9	21	.8	.5	.55	.85	1.85
6		.65	.9	1.25	1.8	22	.8	.55	.6	.85	1.85
7		.65	.8	1.0	1.8	23	.75	.65	.8	.85	1.8
8		.6	.7	1.0	1.75	24	.95	.75	1.3	.9	1.7
9		.6	.6	.9	1.65	25	.95	.65	.95	1.0	1.6
10		.65	.5	.9	1.6	26	.95	.6	.6	1.0	1.5
11		.7	.5	6.05	1.5	27	.9	.6	.6	.95	1.5
12		.65	.8	3.5	1.4	28	.9	.55	.7	1.25	1.45
13		.6	.9	2.6	1.4	29	.85	1.6	1.25	1.25	1.4
14		.55	.8	1.4	1.35	30	.85	1.4	.9	3.5	1.4
15		.55	.75	1.0	2.5	31	.8		.8		1.35
16		.55	.7	.9	2.5						

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897												
1	1.3	1.4	2.05	4.05	4.0	1.9	1.4	1.35	1.0	0.6	0.8	0.75
2	1.25	4.0	1.95	4.1	3.25	1.9	1.4	1.35	1.0	.6	.8	.75
3	1.25	3.0	1.85	5.0	2.75	1.9	1.3	1.3	.95	.6	1.5	.9
4	1.25	2.15	1.85	9.0	2.5	2.2	1.3	1.3	.95	.6	1.0	2.2
5	1.2	2.4	1.8	15.0	2.4	2.0	1.3	1.4	.9	.55	.7	3.5
6	1.2	2.4	9.0	4.5	2.35	1.9	1.4	2.5	.9	.55	.6	1.9
7	1.2	2.5	5.1	4.0	2.3	1.8	1.7	2.0	.9	.55	.6	1.8
8	1.2	2.55	4.0	3.5	2.2	1.8	1.6	1.8	.8	.55	.7	1.8
9	1.15	2.55	3.5	5.5	2.15	1.7	1.6	1.6	.75	.55	.7	1.5
10	1.15	2.5	3.5	5.0	2.2	1.6	1.6	1.6	.75	.55	.8	1.5
11	1.15	2.5	3.6	4.5	2.5	1.6	1.7	1.5	.7	.55	.8	2.1
12	1.2	2.7	21.15	4.3	3.5	1.6	1.5	1.4	.7	2.5	.7	1.8
13	4.15	2.5	11.5	4.0	2.5	1.5	1.4	1.3	.7	1.1	.7	2.0
14	2.2	2.5	13.62	3.5	2.5	1.5	1.4	1.2	.7	1.0	.7	2.7
15	2.1	2.1	10.0	4.5	2.4	1.5	1.5	1.1	.7	1.0	.6	2.5
16	2.1	2.1	8.0	3.5	2.3	2.7	1.5	1.1	.65	.9	.6	2.4
17	2.2	2.05	5.5	3.3	2.3	1.8	1.5	1.1	.7	.8	.7	2.4
18	2.0	2.0	5.0	3.25	2.3	1.6	1.7	1.1	.65	.7	.7	2.6
19	2.0	2.0	6.0	3.2	2.2	1.5	9.9	1.05	.6	.7	.7	2.7
20	3.15	2.0	6.0	3.1	2.2	1.5	3.5	1.05	.6	1.45	.7	2.5
21	4.1	2.05	5.1	3.0	2.1	1.5	2.4	1.05	.6	1.4	.65	3.0
22	2.15	2.1	5.0	3.95	2.1	1.4	3.0	1.05	.6	1.1	.65	3.1
23	2.1	7.0	4.8	3.95	2.0	1.4	2.0	1.0	.6	.8	.65	2.9
24	2.0	3.5	4.5	3.9	2.0	1.5	1.5	1.0	.6	8	.7	2.8
25	2.0	2.5	4.0	3.8	1.9	1.4	1.5	.9	.6	.7	.7	2.5
26	1.9	2.4	3.75	3.7	1.9	1.4	1.9	.9	.6	.7	.7	2.2
27	1.7	2.3	3.5	3.65	1.8	1.4	1.6	.8	.6	.6	.7	2.0
28	1.5	2.2	3.35	3.6	1.8	1.4	1.5	.8	.6	.6	.7	1.8
29	1.4	.....	3.25	3.5	1.8	2.5	1.4	.9	.6	.6	.75	1.5
30	1.3	.....	3.1	3.5	2.5	1.5	1.4	3.5	.65	.6	.75	1.4
31	1.2	.....	3.0	.....	2.0	.....	1.4	1.5	.....	.55	.....	1.3
1898												
1	1.2	2.0	1.4	2.9	2.05	1.2	.95	2.0	2.0	1.4	2.05	2.5
2	1.1	2.0	1.4	2.9	2.0	1.2	.9	2.05	13.2	1.6	2.0	2.4
3	1.0	2.0	1.3	2.9	1.9	1.1	.9	2.0	11.5	1.75	2.0	2.0
4	1.0	1.95	1.3	3.0	1.9	1.1	.9	2.1	7.0	20.5	2.0	1.9
5	1.0	1.95	1.2	13.5	1.8	1.1	1.0	2.0	5.0	23.0	1.9	1.8
6	.9	1.9	1.1	7.0	1.8	1.05	1.1	2.15	4.0	11.5	2.0	1.7
7	.9	1.9	1.1	5.0	1.8	1.05	1.05	1.95	3.2	5.0	1.9	1.7
8	.95	1.8	1.1	4.2	1.7	1.0	1.1	2.0	3.0	3.5	1.9	1.6
9	.95	1.8	1.05	3.5	1.7	1.0	1.1	2.0	2.5	3.0	1.8	1.7
10	1.1	1.8	1.00	3.0	1.6	1.05	1.0	2.25	2.2	3.9	1.7	1.5
11	1.5	1.7	1.0	2.8	1.6	1.0	1.0	4.7	2.0	2.8	1.8	1.6
12	2.0	1.7	1.05	2.0	1.5	1.1	1.1	3.5	1.9	2.6	1.9	1.6
13	2.5	1.6	1.1	2.0	1.5	1.4	1.1	3.0	1.8	2.4	2.0	1.7
14	2.0	1.6	2.0	1.9	1.45	1.6	1.3	2.5	1.5	2.3	2.1	1.7
15	1.8	1.6	1.9	2.05	1.45	1.7	1.4	2.25	1.4	2.3	2.05	1.6

Daily gage height, in feet, of Coosawattee River at Carters—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1898												
16	1.8	1.55	1.8	2.1	1.4	1.6	1.1	2.1	1.3	2.2	2.0	1.8
17	1.7	1.55	1.8	2.1	1.4	1.6	1.2	2.5	1.2	2.2	1.9	1.9
18	1.7	1.5	1.7	2.1	1.4	1.5	1.1	3.0	1.25	4.7	1.9	1.8
19	3.05	1.5	1.7	2.05	1.3	1.8	1.1	2.5	1.3	3.2	2.0	1.7
20	2.3	1.5	1.6	2.1	1.3	2.0	1.05	2.3	1.3	3.0	1.9	1.7
21	2.1	1.45	1.6	2.05	1.3	1 8	1.0	9.5	1.2	2.5	1.8	1.8
22	2.5	1.3	1.5	2.0	1.35	1.7	1.0	3.0	1.2	2.5	2.5	2.0
23	2.5	1.3	1.4	2.5	1.35	1.4	1.1	2.0	1.25	2.5	2.4	2.1
24	2.1	1.2	1.4	3.5	1.4	1.2	1.1	1.6	1.3	2.5	2.4	2.0
25	8.0	1.2	1.6	4.0	1.6	1.05	1.2	1.8	1.2	2.4	2.3	2.0
26	6.1	1.2	1.6	3.0	1.5	1.0	1.3	1.6	1.2	2.4	2.3	1.9
27	3.5	1.5	1.5	2.2	1.5	1.0	1.5	1.5	1.2	2.3	2.4	1.9
28	2.8	1.5	1.5	2.2	1.5	1.05	3.5	1.5	1.2	2.3	2.5	1.8
29	2.5	.....	3.5	2.1	1.4	.9	2.5	1.5	1.3	2.2	2.8	1.7
30	2.5	.....	6.5	2.1	1.3	.95	2.0	1.6	1.3	2.1	2.7	1.7
31	2.1	.....	4.0	.....	1.25	.....	3.0	1.7	.....	2.1	.....	1.8
1899												
1	1.8	2.5	5.0	5.1	3.4	2.0	1.4	1.9	1.0	.75	.95	.95
2	1.9	3.0	4.5	5.0	3.3	1.95	1.5	1.8	1.05	.75	.9	1.3
3	1.9	3.5	3.5	5.2	3.2	1.95	1.4	1.8	1.0	.7	.9	1.2
4	2.0	15.8	3.5	6.0	3.0	1.9	1.4	1.7	1.0	.65	.9	1.2
5	2.05	14.0	6.1	5.8	2.9	2.0	1.45	1.6	.95	.65	.85	1.1
6	2.1	13.2	4.8	5.5	2.9	2.0	1.4	1.5	1.0	.7	.85	1.0
7	2.0	12.5	4.5	5.5	2.8	1.9	1.3	1.45	.95	.7	.8	1.1
8	3.0	8.0	4.0	4.8	2.7	1.9	1.3	1.5	.9	1.5	.8	1.0
9	2.0	6.0	3.2	4.0	2.65	1.85	1.6	1.5	.9	1.2	.9	.9
10	2.0	6.0	3.0	3.7	2.6	1.85	1.5	1.4	.9	1.0	.8	.9
11	2.1	5.0	3.5	3.6	2.5	1.9	1.5	1.4	.95	.9	.8	1.1
12	2.0	4.0	3.5	3.5	2.5	3.2	1.4	1.3	.9	.9	.9	7.4
13	1.9	4.0	4.0	3.4	2.6	3.0	1.4	1.3	.9	.95	.9	5.0
14	1.9	4.5	4.5	3.0	2.6	2.5	1.4	1.6	.9	.9	1.0	3.0
15	2.0	4.5	19.0	3.0	2.5	2.3	1.35	1.5	.85	.9	.9	2.0
16	2.2	4.0	12.0	3.1	2.5	2.2	1.3	1.4	.85	.9	.9	1.5
17	2.8	5.0	10.0	4.0	2.4	2.1	1.7	1.2	.85	.9	1.0	1.3
18	2.6	4.7	9.0	4.0	2.3	2.0	1.5	1.2	.8	.85	1.05	1.1
19	2.4	3.6	7.5	3.75	2.3	1.9	1.6	1.15	.85	.85	1.0	1.1
20	2.3	3.5	6.0	3.5	2.2	1.9	1.8	1.15	.85	.9	1.1	1.2
21	2.1	4.0	5.0	3.4	2.2	1.8	2.2	1.1	.8	.9	1.1	1.2
22	2.1	3.5	8.0	3.5	2.3	1.7	3.0	1.1	.8	.9	1.0	1.4
23	2.0	3.4	7.0	3.5	2.2	1.7	2.5	1.1	.85	.85	.9	1.5
24	2.0	3.5	6.5	4.0	2.15	1.7	2.0	1.05	.85	.85	1.0	3.0
25	2.5	4.0	5.0	6.0	2.15	1.6	2.0	1.05	.8	.8	1.0	2.0
26	2.3	5.0	5.0	5.0	2.1	1.6	3.2	1.1	.8	.8	1.2	1.5
27	2.1	15.0	5.2	4.0	2.1	1.5	3.0	1.1	.8	.75	1.1	1.3
28	2.1	7.0	4.8	4.0	2.05	1.5	3.0	1.05	.8	.8	1.05	1.2
29	2.1	.....	4.5	3.7	2.05	1.4	2.2	1.15	.75	1.0	1.0	1.2
30	2.2	.....	4.6	3.6	2.0	1.45	1.9	1.2	.8	1.0	1.0	1.1
31	2.4	.....	4.4	.....	2.0	.....	2.0	1.1	.....	.9	.....	1.1
1900												
1	1.2	1.4	3.0	2.4	2.7	1.9	3.5	2.0	.....	.....	.....	1.4
2	1.2	1.4	3.1	2.4	2.6	2.0	3.5	2.0	.....	.....	.....	1.4
3	1.1	1.3	2.7	2.5	2.5	2.0	5.0	1.9	.....	.....	.....	1.5
4	1 1	1.4	2.8	2.6	2.4	2.0	4.8	1.9	.....	.....	1.5	1.6
5	1.0	1.5	4.75	2.5	2.3	2.1	4.0	1.8	.....	.....	1.4	1.8
6	1.0	1.7	4.75	2.6	2.2	2.2	3.8	1.7	.....	.....	1.5	1.7
7	1.1	1.8	4.9	2.6	2.2	5.0	3.6	1.7	.....	.....	1.5	1.6
8	1.1	2.0	5.2	2.5	2.1	3.0	3.5	1.7	.....	.....	1.6	1.6
9	1.2	4.1	5.0	2.6	2.4	5.0	3.4	1.6	.....	.....	1.6	1.6
10	4.0	2.5	4.6	2.7	2.2	4.5	3.5	1.6	.....	.....	1.5	1.5
11	4.3	2.5	3.1	4.0	2.0	3.0	3.4	1.6	.....	.....	1.5	1.4
12	7.0	8.5	2.9	5.0	1.9	2.2	3.3	1.6	.....	.....	1.4	1.4
13	3.5	20.5	3.0	3.0	1.7	2.0	3.0	1.5	.....	.....	1.4	1.5
14	2.0	5.4	2.9	2.5	1.7	2.4	2.8	1.5	.....	.....	1.3	1.6
15	1.9	4.0	2.8	2.6	1.8	2.6	2.6	1.4	.....	.....	1.3	1.7

Daily gage height, in feet, of Coosawattee River at Carters—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1900												
16	1.7	3.2	2.5	2.7	1.8	3.0	2.6	1.4	.....	.....	1.3	1.6
17	1.7	2.8	2.5	2.8	2.1	3.0	2.4	1.5	.....	.....	1.4	1.8
18	2.0	2.7	3.0	3.0	2.0	3.4	2.2	1.5	.....	.....	1.4	2.0
19	4.3	2.5	7.5	3.5	1.9	5.0	2.0	1.5	.....	.....	1.4	4.0
20	4.0	2.2	4.0	3.7	1.8	5.6	2.0	1.6	.....	.....	1.3	4.2
21	2.5	3.0	3.5	4.5	1.7	4.2	2.0	1.6	.....	.....	1.3	3.2
22	2.2	3.2	3.0	3.5	1.7	4.7	1.9	1.8	.....	.....	1.4	2.6
23	2.0	3.1	2.9	3.0	1.8	4.5	1.8	2.0	.....	.....	1.4	2.7
24	2.0	3.05	2.5	2.9	1.9	4.0	3.0	2.5	.....	.....	1.6	2.6
25	1.9	3.0	2.0	2.8	2.0	5.0	2.2	1.9	.....	.....	3.5	2.5
26	1.8	3.0	5.0	2.7	2.1	6.0	3.5	.....	.....	.....	5.0	2.5
27	1.8	2.9	3.6	2.8	2.0	6.5	5.2	.....	.....	.....	4.0	2.4
28	1.7	2.5	3.5	3.0	1.9	5.0	3.2	.....	.....	.....	2.5	2.3
29	1.6	.....	3.1	3.1	1.8	4.5	2.4	.....	.....	.....	1.5	2.4
30	1.5	.....	3.0	3.0	1.8	4.0	2.3	.....	.....	.....	1.5	2.5
31	1.5	.....	2.8	.....	1.9	.....	2.2	.....	.....	.....	.....	2.6
1901												
1	3.1	4.0	2.3	5.0	3.0	5.0	3.3	1.7	3.7	2.6	1.8	2.0
2	3.0	3.0	2.2	8.0	2.9	3.8	3.2	2.0	3.5	2.6	1.7	2.3
3	2.5	6.75	2.2	6.0	2.9	3.5	3.0	2.1	3.0	2.5	1.7	2.5
4	2.5	6.0	2.3	5.0	2.8	3.4	2.8	2.5	3.0	2.5	1.7	2.5
5	2.4	8.5	2.2	4.5	2.8	3.3	2.8	5.0	2.7	2.4	1.8	2.6
6	2.2	5.0	2.3	4.5	2.6	3.1	2.6	4.5	2.6	2.4	1.8	2.8
7	2.1	4.0	2.3	4.2	2.6	3.0	3.0	3.0	2.5	2.3	1.7	2.9
8	2.1	4.0	2.2	4.0	2.5	3.2	2.8	2.5	2.5	2.2	1.8	3.0
9	2.05	6.5	2.1	3.9	2.5	3.2	2.6	2.0	2.4	2.2	1.9	3.1
10	2.0	5.2	4.8	3.9	2.4	3.4	2.6	2.25	2.4	2.1	1.8	3.0
11	16.5	5.0	3.6	3.8	2.4	3.5	2.5	2.0	2.6	2.1	1.8	2.9
12	6.0	4.5	3.2	3.5	2.3	4.0	2.4	2.5	2.7	2.0	1.7	2.9
13	6.0	4.0	3.0	3.5	2.4	4.5	2.5	3.0	2.5	2.0	1.7	3.0
14	5.0	3.5	2.8	3.2	2.5	5.0	2.4	9.0	2.5	2.0	1.8	13.0
15	4.1	3.2	2.7	4.6	2.4	5.2	2.3	4.5	3.0	1.9	1.8	9.0
16	3.6	3.0	2.6	4.2	2.5	4.8	2.2	5.0	19.0	1.9	1.9	6.0
17	3.2	3.0	2.5	4.0	2.5	4.0	2.0	4.5	7.0	1.8	1.8	4.5
18	3.0	3.0	2.6	4.0	3.0	3.5	1.8	5.0	4.5	1.8	1.9	3.0
19	3.0	2.9	2.7	12.0	3.0	3.0	1.6	5.0	4.0	1.8	1.9	2.9
20	2.5	2.9	2.6	7.0	4.0	2.8	1.8	6.0	3.5	1.9	1.8	2.9
21	2.5	2.8	2.5	6.0	19.5	2.6	2.0	17.0	3.5	1.9	1.8	2.8
22	2.7	2.8	2.5	5.0	12.0	2.6	2.2	15.0	3.4	1.8	1.9	2.8
23	2.8	2.6	2.7	4.1	8.0	2.5	2.3	10.0	3.2	1.8	1.9	3.0
24	3.0	2.6	3.2	3.8	6.0	2.5	2.0	8.0	3.1	1.7	2.0	2.9
25	3.0	2.5	14.65	3.7	5.0	2.4	2.0	7.0	3.0	1.7	2.0	3.0
26	2.6	2.4	18.3	3.5	5.0	2.4	2.0	6.5	3.0	1.8	2.1	3.1
27	2.6	2.5	9.0	3.4	4.5	2.6	1.9	6.0	2.9	1.8	2.0	5.5
28	2.4	2.4	7.0	3.2	4.5	2.6	1.8	4.0	2.8	1.8	1.9	9.0
29	2.4	.....	7.0	3.0	4.4	3.0	1.7	4.0	2.6	1.8	1.8	21.5
30	2.5	.....	6.0	3.0	4.2	3.5	1.6	4.2	2.7	1.9	1.8	13.0
31	3.5	.....	6.2	.....	4.0	.....	1.5	4.0	.....	1.9	.....	11.0
1902												
1	9.0	11.0	15.0	4.0	3.0	1.7	1.7	.9	.9	1.0	.7	2.5
2	7.0	9.0	15.0	3.9	3.0	1.7	1.7	.8	.8	1.0	.7	3.0
3	6.0	7.5	10.0	3.8	2.9	1.8	1.6	.9	1.0	.9	.8	5.0
4	5.0	5.0	9.0	4.0	2.7	1.8	1.6	.8	.9	.9	.8	4.0
5	4.0	4.0	8.0	3.8	2.5	1.8	1.6	.8	1.0	1.0	.8	3.0
6	3.0	3.9	6.5	3.4	2.7	1.7	1.6	.9	.9	.9	1.0	2.0
7	2.9	3.8	5.0	3.6	2.6	1.9	1.7	.9	.8	.8	2.0	1.3
8	2.9	3.8	4.0	3.8	2.5	2.5	1.5	.8	1.0	.8	1.7	1.7
9	2.8	3.7	3.5	3.7	2.4	2.3	1.5	.8	.9	.8	.9	1.5
10	2.8	3.7	3.5	3.4	2.4	1.8	1.5	1.0	.8	.9	.9	1.4
11	2.7	3.6	3.9	3.3	2.4	1.7	1.6	2.1	.8	1.4	.8	1.2
12	2.7	3.6	3.8	3.3	2.3	1.7	1.5	1.8	2.0	1.0	.7	1.1
13	2.8	3.5	3.7	3.3	2.3	1.6	1.5	1.5	1.5	.9	.7	1.1
14	2.8	3.4	3.5	3.2	2.2	1.6	1.4	1.0	1.1	2.5	.8	1.0
15	2.7	3.4	3.4	3.2	2.2	1.7	1.4	.9	.9	1.4	.8	1.0

Daily gage height, in feet, of Coosawattee River at Carters—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1902												
16	2.6	3.5	6.4	3.1	2.3	1.8	1.3	.9	.8	1.2	.7	3.0
17	2.6	3.5	5.2	3.1	2.3	1.7	1.3	.9	.8	.9	1.6	2.0
18	2.5	3.5	3.8	3.2	2.5	1.5	1.3	1.0	.8	.9	1.5	1.8
19	2.6	3.6	4.7	3.0	2.3	1.5	1.2	.9	.9	.8	1.1	1.7
20	2.5	3.7	4.4	2.9	2.2	1.4	1.2	.8	1.9	.8	.9	1.6
21	2.4	3.8	3.4	2.9	2.4	1.4	1.2	.9	1.1	.8	.9	6.5
22	2.5	4.0	3.3	2.8	2.2	1.5	1.2	1.0	.9	.9	1.0	4.0
23	2.5	4.0	3.8	2.9	2.1	1.5	1.1	.9	.9	.9	1.2	2.5
24	2.4	3.8	3.3	2.9	2.0	1.6	1.1	.8	1.0	.8	1.5	2.0
25	2.4	3.6	3.3	2.9	1.9	1.6	1.1	.8	1.2	.8	6.5	1.7
26	2.4	3.5	3.4	2.8	2.0	1.5	1.0	.8	2.0	.8	4.5	1.5
27	2.5	4.0	3.5	2.8	2.0	1.4	1.0	.9	1.3	.7	4.0	1.3
28	2.5	23.0	4.2	2.8	1.9	1.4	.9	1.0	1.1	.7	3.5	1.2
29	2.6	.....	18.0	2.9	1.9	1.5	.9	1.4	.9	.8	3.0	2.2
30	2.9	.....	5.0	3.0	1.8	1.6	.9	1.1	.9	.8	2.5	2.8
31	3.5	.....	4.7	.....	1.8	.....	.9	.9	.....	.8	.....	1.0
1903												
1	1.7	2.0	9.2	6.0	3.4	4.5	2.6	2.2	1.3	1.0	1.2	1.1
2	2.0	2.5	5.4	5.2	3.2	5.0	2.5	2.3	1.2	1.0	1.2	1.1
3	2.5	3.0	4.6	4.9	3.2	5.2	2.4	2.4	1.2	1.0	1.4	1.2
4	2.0	10.0	4.1	5.0	3.1	5.0	2.3	2.5	1.2	1.0	1.3	1.2
5	1.6	9.0	4.1	4.4	3.0	6.8	2.3	2.4	1.2	1.0	1.2	1.2
6	1.6	7.0	5.0	4.2	2.8	5.5	2.2	2.3	1.3	.9	1.2	1.1
7	1.5	8.0	3.7	4.1	2.8	4.2	2.1	2.2	1.3	.9	1.1	1.05
8	1.4	7.0	5.9	8.0	2.7	3.5	2.0	2.1	1.2	2.0	1.1	1.05
9	1.4	6.0	4.6	4.1	2.7	3.6	2.2	2.3	1.2	1.4	1.05	1.1
10	1.2	6.0	5.1	4.2	2.7	3.0	2.3	2.4	1.15	1.2	1.05	1.1
11	3.3	9.0	8.9	4.0	2.6	4.7	2.5	2.3	1.1	1.0	1.2	1.1
12	2.7	6.5	4.8	3.8	2.6	4.2	3.0	2.2	1.05	1.05	1.3	1.2
13	2.4	4.5	4.3	10.0	2.5	3.5	9.0	2.1	1 05	1.0	1.1	1.4
14	2.1	4.0	4.2	5.4	2.5	3.4	6.0	2.1	1.1	1.0	1.1	1.3
15	2.0	4.0	4.0	4.8	2.4	3.0	4.2	2.0	1.2	1.0	1.1	1.3
16	2.0	10.5	3.8	4.4	2.5	2.8	3.8	2.2	1.6	1.05	1.2	1.2
17	1.9	9.0	3.7	4.1	2.5	2.6	3.5	2.1	1.4	1.6	2.8	1.2
18	2.0	6.0	3.4	3.9	2.5	2.5	3.0	2.0	1.3	1.3	2.6	1.2
19	1.9	4.2	3.4	4.0	2.4	2.4	2.8	1.9	1.2	1.2	2.4	1.2
20	1.8	4.0	3.3	4.0	2.4	2.2	2.4	1.8	1.1	1.2	2.0	1.5
21	1.8	3.5	4.3	3.9	2.6	2.2	2.3	1.7	1.1	1.1	1.9	1.2
22	1.7	3.3	6.1	3.9	2.4	2.0	2.2	1.6	1.1	1.05	1.7	1.1
23	1.7	3.2	18.2	3.8	2.4	2.1	2.1	1.5	1.05	1.0	1.4	1.1
24	1.6	3.1	8.1	3.8	2.5	2.2	2.2	1.4	1.1	1.0	1.3	1.2
25	1.6	3.0	5.2	3.7	2.6	3.0	2.1	1.4	1.1	1.05	1.2	1.2
26	1.5	2.9	4.6	3.7	2.6	3.5	2.0	1.3	1.05	1.1	1.2	1.7
27	1.5	3.4	4.2	3.6	2.4	4.0	2.0	1.3	1.05	1.1	1.2	1.4
28	1.5	21.5	4.4	3.5	2.3	3.0	2.2	1.2	1.05	1.0	1.3	1.2
29	2.5	.....	6.4	3.6	3.0	3.0	2.1	1.2	1.05	1.0	1.2	1.1
30	2.2	.....	21.0	3.5	3.5	2.9	2.2	1.2	1.05	1.1	1.1	1.1
31	2.0	.....	7.8	.....	5.0	.....	2.4	1.3	.....	1.2	.....	1.1
1904												
1	1.2	1.5	1.7	2.2	1.7	2.0	1.1	5.0	.8	.5	.4	2.0
2	1.1	1.5	1.7	2.2	1.7	1.8	1.0	2.0	.7	.5	.4	2.2
3	1.4	1.5	1.7	2.1	1.7	1.5	1.0	1.5	.7	.5	.4	1.8
4	1.1	1.5	3.5	2.0	2.0	1.3	1.0	1.3	.7	.45	.7	1.6
5	1.1	1.4	3.75	1.9	1.8	1.2	1.0	1.6	.9	.45	.6	1.8
6	1.1	1.3	3.0	1.9	1.7	3.1	1.4	1.2	.8	.45	.6	1.6
7	1.1	1.4	3.0	1.9	1.7	3.0	1.3	1.1	.7	.45	.5	1.4
8	1.1	2.8	2.5	4.0	4.45	2.0	1.8	1.6	.7	.45	.5	1.3
9	1.1	2.6	2.2	3.0	3.0	1.8	1.5	2.0	.6	.4	.5	1.2
10	1.1	1.8	2.1	2.5	2.0	1.6	1.2	1.5	.6	.4	.5	1.1
11	1.3	1.6	2.0	2.3	1.8	1.3	1.0	1.4	.6	.4	.4	1.0
12	1.3	1.5	1.9	2.2	1.7	1.3	2.05	1.3	.6	.4	.4	1.0
13	1.3	1.5	1.8	2.0	1.7	1.2	1.7	1.1	.5	.4	.4	1.0
14	1.3	1.4	4.8	1.9	1.7	1.2	1.2	1.0	.5	.4	.4	.9
15	1.2	1.7	2.8	1.9	1.6	1.2	1.0	1.0	.7	.4	.4	.9

Daily gage height, in feet, of Coosawattee River at Carters—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
16	1.3	1.7	2.2	1.9	1.6	1.2	1.0	1.0	.6	.4	.4	.9
17	2.8	1.6	2.1	1.8	1.6	1.1	1.8	1.0	.6	.4	.4	.85
18	1.9	1.6	2.0	1.8	1.6	1.1	1.3	1.0	.5	.4	.4	.85
19	1.5	3.4	1.8	1.8	1.5	1.1	1.0	.9	.5	.4	.4	.85
20	1.4	3.0	1.8	1.8	1.5	1.0	1.0	.9	.4	.4	.4	.85
21	1.4	2.3	1.8	1.8	1.5	3.0	.9	.9	.4	.4	.4	.85
22	4.35	4.8	2.0	1.8	1.5	2.0	1.8	.8	.4	.4	.5	.85
23	3.0	3.5	5.2	1.8	1.4	1.5	1.5	.8	.5	.4	.6	.8
24	2.3	2.4	3.8	1.7	1.4	1.2	1.0	.8	.5	.4	.6	.8
25	2.0	2.2	2.9	1.7	1.3	1.0	1.0	.9	.5	.4	.6	1.0
26	1.7	2.1	2.8	4.0	1.3	1.0	1.0	1.0	.45	.4	.6	1.3
27	1.6	2.0	2.8	2.5	1.3	1.0	.9	.9	.5	.4	.6	3.9
28	1.5	1.8	2.6	2.0	1.2	1.2	1.1	1.0	.5	.4	.5	4.0
29	1.5	1.8	2.5	1.8	1.2	1.2	1.0	.9	.5	.4	.5	2.0
30	1.5	.....	2.4	1.7	1.2	1.8	1.0	.9	.5	.4	1.8	1.8
31	1.5	.....	2.3	.....	3.7	.....	.9	.8	.....	.4	.....	1.8
1905												
1	1.3	1.4	3.0	2.4	2.5	2.0	1.9	1.5	1.4	1.0	1.1	1.1
2	1.8	1.5	3.0	2.2	2.0	2.0	1.8	1.5	4.2	1.0	1.1	2.0
3	1.8	1.4	2.8	2.1	2.0	1.95	1.8	1.4	3.5	1.1	1.1	18.2
4	1.8	1.4	2.7	2.0	1.9	1.8	1.8	1.4	2.0	1.0	1.0	9.0
5	1.7	1.4	2.6	2.0	1.9	1.8	1.9	1.35	1.6	1.0	1.0	4.0
6	1.7	1.5	2.3	2.3	2.3	1.75	2.0	1.35	1.4	.9	1.0	3.0
7	1.1	3.0	2.2	2.2	2.3	1.75	2.0	1.35	1.4	.9	1.0	3.0
8	1.2	9.5	2.2	2.2	2.2	1.7	1.9	1.6	1.35	.9	1.0	12.0
9	1.3	13.0	2.5	2.1	2.1	1.7	2.0	1.6	1.3	1.0	1.0	9.6
10	1.2	5.0	3.0	2.1	2.0	1.8	3.0	2.0	1.3	1.0	1.0	4.5
11	1.1	4.0	4.2	2.3	2.0	1.8	5.0	4.0	1.3	3.0	.9	2.5
12	14.5	4.0	3.2	2.5	1.9	1.7	5.5	3.0	6.0	1.8	.9	2.5
13	7.3	6.0	2.4	2.4	1.9	1.7	4.0	2.5	2.0	1.8	.9	2.5
14	4.2	4.0	2.3	2.3	1.85	1.7	2.0	2.0	1.5	1.8	.9	2.5
15	3.6	3.0	2.3	2.2	3.5	1.9	1.9	3.5	1.4	1.6	.9	2.5
16	3.1	3.0	2.2	2.0	5.5	1.8	1.9	3.0	1.3	1.4	.9	2.3
17	3.0	2.6	2.2	2.0	3.3	1.8	1.8	2.5	1.3	1.4	.9	2.2
18	2.8	2.6	2.1	1.95	2.5	1.7	1.8	2.4	1.2	1.4	.9	2.2
19	2.6	2.8	2.0	1.95	3.3	1.8	1.8	2.0	1.2	1.3	1.0	2.1
20	2.4	14.0	2.0	1.8	2.4	1.8	1.7	2.0	1.15	1.3	1.0	2.1
21	2.3	10.0	6.5	1.8	2.2	1.75	1.7	1.8	1.15	1.4	1.0	5.0
22	2.0	6.0	3.5	1.85	7.0	1.9	1.7	1.8	1.1	1.4	.9	4.0
23	1.8	4.0	3.0	1.9	4.0	1.9	1.8	1.7	1.05	1.3	.9	3.6
24	1.6	3.5	2.6	2.0	3.5	1.8	2.0	1.7	1.0	1.3	1.1	3.2
25	1.4	3.0	2.5	2.0	3.0	1.8	1.8	1.6	1.0	1.2	2.0	3.0
26	1.2	3.5	2.4	1.9	2.8	1.9	1.8	1.6	1.0	1.2	2.1	2.5
27	1.1	3.3	2.3	2.5	2.5	3.5	1.7	1.5	1.0	1.2	1.5	2.5
28	1.2	3.2	2.2	2.1	2.3	3.0	1.7	1.4	1.0	1.2	1.1	2.4
29	1.3	.....	2.2	2.0	2.3	2.0	1.6	1.4	1.0	1.3	1.1	2.4
30	1.3	.....	2.5	3.5	2.2	2.0	1.6	1.4	1.0	1.3	1.1	2.4
31	1.4	.....	2.5	.....	2.2	.....	1.5	1.4	.....	1.2	.....	2.4
1906												
1	2.4	3.2	2.3	4.6	2.8	2.5	2.1	3.0	2.8	7.0	2.8	2.9
2	3.0	3.2	2.4	4.0	2.8	3.0	2.1	4.0	2.8	6.0	2.8	2.8
3	10.5	3.1	5.0	3.9	4.2	2.6	2.4	3.5	2.7	5.6	2.8	2.8
4	4.0	3.1	4.0	3.7	3.3	2.5	2.5	3.0	2.6	5.0	2.2	2.8
5	3.0	3.0	3.0	3.5	3.0	5.5	2.3	7.0	2.6	5.0	2.2	2.7
6	2.6	3.0	2.9	3.6	5.0	3.0	2.2	5.0	2.5	4.8	2.1	2.8
7	2.5	3.2	2.8	4.0	3.9	2.5	2.2	3.5	2.5	4.5	2.1	2.8
8	2.5	3.2	2.8	3.8	3.6	2.5	2.1	3.0	7.0	4.3	2.1	2.7
9	2.8	3.0	2.8	5.0	3.0	2.4	2.3	2.6	4.0	3.5	2.2	2.7
10	3.0	2.9	2.7	4.5	2.8	2.4	2.3	2.8	3.5	3.3	2.3	4.5
11	3.5	2.9	2.7	4.0	2.6	2.8	2.2	3.0	3.4	3.1	2.4	3.2
12	3.0	2.8	2.7	3.0	2.6	2.7	2.2	2.8	3.0	3.0	2.4	3.0
13	2.5	2.7	3.0	2.8	2.5	14.0	2.1	2.6	2.8	2.9	2.3	2.8
14	2.5	2.6	4.0	2.8	2.5	5.5	3.5	2.6	2.7	2.8	2.3	2.8
15	2.5	2.5	18.8	4.0	2.5	8.0	2.5	2.5	2.7	2.7	2.4	2.8

Daily gage height, in feet, of Coosawattee River at Carters—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
16	3.6	2.4	6.0	3.6	2.4	5.0	2.0	2.5	2.6	2.6	2.4	3.0
17	3.5	2.4	5.0	3.4	2.4	4.5	3.0	2.5	2.5	2.6	2.6	3.6
18	3.5	2.4	4.8	3.2	2.3	3.5	5.5	2.6	2.5	5.0	13.2	4.0
19	3.6	2.4	13.0	3.1	2.3	3.0	8.2	2.8	5.0	3.5	26.0	4.8
20	3.6	2.4	7.0	3.0	2.2	2.8	5.0	2.7	4.0	3.3	9.4	3.8
21	3.8	2.4	5.0	3.0	2.2	2.7	4.2	2.6	3.0	3.1	5.4	3.7
22	10.5	2.6	4.0	3.0	2.1	2.6	5.0	2.5	2.8	3.0	4.8	3.7
23	11.0	2.5	3.8	2.9	2.1	2.5	4.6	2.5	2.5	3.8	4.0	3.6
24	6.5	2.5	3.7	2.9	2.1	3.1	4.0	2.8	2.6	3.6	3.6	3.6
25	4.5	2.5	3.6	2.8	2.1	3.0	3.5	2.7	4.2	3.4	3.4	3.6
26	4.0	2.4	3.5	2.8	7.0	2.9	3.0	2.6	2.8	3.2	3.2	3.5
27	3.5	2.4	4.3	2.7	3.0	2.8	3.5	2.6	2.6	3.0	3.1	3.5
28	3.5	2.4	4.2	4.0	2.8	2.5	3.5	2.8	2.5	2.6	3.05	4.5
29	3.4	.....	4.1	3.0	2.6	2.4	4.0	2.7	2.5	2.4	3.0	5.0
30	3.4	.....	8.5	3.0	2.5	2.3	4.7	2.6	4.0	2.4	3.0	5.0
31	3.3	.....	5.4	.....	2.5	.....	3.1	3.0	.....	2.4	.....	9.0

Rating tables for Coosawattee River at Carters.

AUGUST 17, 1896, TO DECEMBER 31, 1897.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.40	158	1.90	722	3.30	1,506	5.40	2,808
.50	188	2.00	771	3.40	1,568	5.60	2,932
.60	219	2.10	821	3.50	1,630	5.80	3,056
.70	250	2.20	872	3.60	1,692	6.00	3,180
.80	284	2.30	924	3.70	1,754	7.00	3,800
.90	318	2.40	977	3.80	1,816	8.00	4,420
1.00	353	2.50	1,031	3.90	1,878	9.00	5,040
1.10	388	2.60	1,086	4.00	1,940	10.00	5,660
1.20	423	2.70	1,143	4.20	2,064	12.00	7,160
1.30	460	2.80	1,201	4.40	2,188	14.00	8,660
1.40	499	2.90	1,260	4.60	2,312	16.00	10,160
1.50	540	3.00	1,320	4.80	2,436	18.00	11,660
1.60	583	3.10	1,382	5.00	2,560	20.00	13,160
1.70	628	3.20	1,444	5.20	2,684	22.00	14,660
1.80	674						

JANUARY 1 TO DECEMBER 31, 1898.[b]

0.90	313	2.00	771	3.10	1,380	4.10	2,043
1.00	355	2.10	821	3.20	1,440	4.20	2,120
1.10	398	2.20	872	3.30	1,500	4.30	2,199
1.20	423	2.30	924	3.40	1,560	4.40	2,280
1.30	460	2.40	977	3.50	1,623	4.50	2,350
1.40	499	2.50	1,031	3.60	1,690	4.60	2,420
1.50	540	2.60	1,086	3.70	1,760	4.70	2,480
1.60	583	2.70	1,143	3.80	1,830	4.80	2,540
1.70	628	2.80	1,201	3.90	1,900	4.90	2,600
1.80	674	2.90	1,260	4.00	1,970	5.00	2,660
1.90	722	3.00	1,320				

a Between gage height 3.00 and 10.00 feet the rating curve is a tangent, the difference being 62 per tenth. Above gage height 10.00 feet the rating curve is a tangent with a difference of 75 per tenth.

b Above gage height 5.00 feet the table is the same as that for 1899.

Rating tables for Coosawattee River at Carters—Continued.

JANUARY 1 TO DECEMBER 31, 1899.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.60	230	2.50	1,031	4.60	2,378	8.20	4,826
.70	250	2.60	1,086	4.80	2,514	8.40	4,962
.80	280	2.70	1,142	5.00	2,650	8.60	5,098
.90	310	2.80	1,200	5.20	2,786	8.80	5,234
1.00	345	2.90	1,250	5.40	2,922	9.00	5,370
1.10	382	3.00	1,318	5.60	3,058	9.50	5,710
1.20	420	3.10	1,378	5.80	3,194	10.00	6,050
1.30	457	3.20	1,440	6.00	3,330	10.50	6,390
1.40	496	3.30	1,503	6.20	3,466	11.00	6,730
1.50	537	3.40	1,566	6.40	3,602	11.50	7,070
1.60	580	3.50	1,632	6.60	3,738	12.00	7,410
1.70	627	3.60	1,698	6.80	3,874	13.00	8,090
1.80	675	3.70	1,766	7.00	4,010	14.00	8,770
1.90	722	3.80	1,834	7.20	4,146	15.00	9,450
2.00	770	3.90	1,902	7.40	4,282	16.00	10,130
2.10	820	4.00	1,970	7.60	4,418	17.00	10,810
2.20	872	4.20	2,106	7.80	4,554	18.00	11,490
2.30	924	4.40	2,242	8.00	4,690	19.00	12,170
2.40	977						

JANUARY 1, 1900, TO DECEMBER 31, 1901.[b]

1.00	355	3.10	1,345	5.20	2,694	9.20	5,574
1.10	390	3.20	1,400	5.40	2,838	9.40	5,718
1.20	425	3.30	1,455	5.60	2,982	9.60	5,862
1.30	460	3.40	1,510	5.80	3,126	9.80	6,006
1.40	495	3.50	1,567	6.00	3,270	10.00	6,150
1.50	535	3.60	1,625	6.20	3,414	10.50	6,510
1.60	575	3.70	1,687	6.40	3,558	11.00	6,870
1.70	622	3.80	1,750	6.60	3,702	11.50	7,230
1.80	670	3.90	1,812	6.80	3,846	12.00	7,590
1.90	717	4.00	1,875	7.00	3,990	12.50	7,950
2.00	765	4.10	1,942	7.20	4,134	13.00	8,310
2.10	815	4.20	2,010	7.40	4,278	14.00	9,030
2.20	865	4.30	2,077	7.60	4,422	15.00	9,750
2.30	917	4.40	2,145	7.80	4,566	16.00	10,470
2.40	970	4.50	2,212	8.00	4,710	17.00	11,190
2 50	1,022	4.60	2,280	8.20	4,854	18.00	11,910
2 60	1,075	4.70	2,347	8.40	4,998	19.00	12,630
2.70	1,127	4.80	2,415	8.60	5,142	20.00	13,350
2.80	1,180	4.90	2,482	8.80	5,286	22.00	14,790
2.90	1,235	5.00	2,550	9.00	5,430	24.00	16,230
3.00	1,290						

JANUARY 1, 1902, TO DECEMBER 31, 1903.[c]

0.70	250	0.90	310	1.10	382	1.30	455
.80	280	1.00	345	1.20	420	1.40	496

JANUARY 1 TO DECEMBER 31, 1904.[d]

0.40	184	1.50	512	2.60	1,058	3.60	1,620
.50	202	1.60	557	2.70	1,112	3.70	1,680
.60	222	1.70	603	2.80	1,166	3.80	1,740
.70	244	1.80	650	2.90	1,220	3.90	1,805
.80	269	1.90	698	3.00	1,275	4.00	1,870
.90	296	2.00	747	3.10	1,330	4.20	2,000
1.00	326	2.10	797	3.20	1,385	4.40	2,130
1.10	358	2.20	848	3.30	1,440	4.60	2,270
1.20	393	2.30	900	3.40	1,500	4.80	2,410
1.30	430	2.40	952	3.50	1,560	5.00	2,550
1.40	470	2.50	1,005				

a Above gage height 4.00 feet the rating curve is a tangent, the difference being 68 per tenth.
b Above gage height 5.00 feet the rating curve is a tangent, the difference being 72 per tenth.
c Above gage height 1.40 feet this table is the same as the 1901 table.
d Above gage height 5.00 feet this table is the same as the 1901 table.

Rating tables for Coosawattee River at Carters—Continued.

JANUARY 1 TO DECEMBER 31, 1905.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.90	325	1.50	560	2.10	830	2.60	1,070
1.00	360	1.60	605	2.20	875	2.70	1,120
1.10	400	1.70	650	2.30	920	2.80	1,170
1.20	440	1.80	695	2.40	970	2.90	1,220
1.30	490	1.90	740	2.50	1,020	3.00	1,275
1.40	520	2.00	785				

a Above gage height 3.0 feet the rating curve is the same as the 1904 table.

Rating table for Coosawattee River at Carters, for 1906.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.00	785	2.80	1,170	3.60	1,620	4.80	2,410
2.10	830	2.90	1,220	3.70	1,680	5.00	2,550
2.20	875	3.00	1,275	3.80	1,740	5.20	2,694
2.30	920	3.10	1,330	3.90	1,805	5.40	2,838
2.40	970	3.20	1,385	4.00	1,870	5.60	2,982
2.50	1,020	3.30	1,440	4.20	2,000	5.80	3,126
2.60	1,070	3.40	1,500	4.40	2,130	6.00	3,270
2.70	1,120	3.50	1,560	4.60	2,270	7.00	3,990

NOTE.—The above table is based on discharge measurements made during 1902–1906 and is well defined below gage height 8 feet. Above gage height 5 feet the rating curve is a tangent, the difference being 72 per tenth.

Estimated monthly discharge of Coosawattee River at Carters.

[Drainage area, 531 square miles]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1896[a]					
August 17–31	336	267	307	0.58	0.32
September	583	173	245	.46	.51
October	460	188	284	.53	.62
November	3,211	284	588	1.11	1.24
December	1,031	480	684	1.29	1.49
1897					
January	2,033	405	710	1.33	1.53
February	3,800	499	1,092	2.05	2.14
March	14,022	698	2,908	5.47	6.31
April	9,410	1,320	1,852	3.48	3.88
May	1,940	674	959	1.80	2.08
June	1,148	499	633	1.19	1.33
July	5,600	460	787	1.48	1.71
August	1,630	284	496	0.93	1.07
September	353	219	259	0.49	0.55
October	1,031	205	293	0.55	0.63
November	540	219	263	0.49	0.55
December	1,630	265	444	0.83	0.96
The year	14,022	205	891	1.67	22.73

a The estimates for 1896 were revised on the basis of the 1897 rating curve.

Estimated monthly discharge of Coosawattee River at Carters—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1898 a					
January	4,690	313	987	1.76	2.03
February	771	423	601	1.18	1.18
March	3,670	355	699	1.31	1.51
April	8,490	722	1,470	2.76	3.08
May	796	442	566	1.06	1.22
June	771	313	459	0.86	0.95
July	1,624	313	491	0.92	1.06
August	5,710	541	1,062	1.99	2.29
September	8,226	423	1,300	2.45	2.73
October	14,890	499	2,159	4.06	4.68
November	1,200	627	823	1.55	1.73
December	1,031	541	689	1.30	1.50
The year	14,890	313	938	1.76	23.96
1899					
January	1,318	675	853	1.60	1.84
February	9,994	1,031	3,448	6.48	6.75
March	12,170	1,318	3,224	6.06	6.99
April	3,330	1,318	2,112	3.97	4.43
May	1,566	770	1,033	1.94	2.24
June	1,440	495	750	1.41	1.57
July	1,440	457	698	1.31	1.51
August	722	363	476	0.89	1.02
September	363	265	305	0.57	0.63
October	537	240	305	0.57	0.66
November	420	280	329	0.62	0.69
December	4,282	310	691	1.30	1.50
The year	12,170	240	1,185	2.23	29.83
1900					
January	3,990	365	912	1.71	1.97
February	13,710	455	1,707	3.21	3.34
March	4,350	765	1,645	3.09	3.56
April	2,550	970	1,294	2.43	2.71
May	1,127	622	783	1.47	1.69
June	3,630	717	1,747	3.28	3.66
July	2,694	670	1,344	2.53	2.92
August 1-25	1,022	495	632	1.19	1.11
November 4-30	2,550	455	693	1.30	1.30
December	2,010	495	837	1.57	1.81
1901					
January	14,790	765	1,625	3.06	3.53
February	5,070	970	1,871	3.52	3.67
March	14,070	815	2,214	4.17	4.81
April	9,750	1,290	2,306	4.34	4.84
May	16,950	917	2,153	4.06	4.68
June	2,694	970	1,538	2.90	3.24
July	1,455	535	923	1.74	2.01
August	16,230	622	2,778	5.23	6.03
September	12,630	970	1,761	3.32	3.70
October	1,075	622	783	1.47	1.69
November	815	622	686	1.29	1.44
December	15,510	765	2,689	5.06	5.83
The year	16,950	535	1,777	3.35	45.47
1902					
January	5,430	970	1,487	2.80	3.23
February	15,510	1,510	2,622	4.94	5.14
March	11,910	1,455	3,127	5.89	6.79
April	1,875	1,180	1,437	2.71	3.02
May	1,290	670	927	1.75	2.02
June	1,022	495	614	1.16	1.29
July	622	310	469	0.88	1.01
August	815	280	350	0.66	0.76
September	765	280	375	0.71	0.79
October	1,022	250	337	0.63	0.73
November	3,630	250	676	1.27	1.42
December	3,630	345	914	1.72	1.98
The year	15,510	250	1,111	2.09	28.18

a Estimates for 1898 have been revised above gage height 5.0 feet on the basis of the 1899 rating curve.

Estimated monthly discharge of Coosawattee River at Carters—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1903					
January	1,455	420	721	1.36	1.57
February	14,430	765	3,294	6.20	6.46
March	14,070	1,455	3,295	6.20	7.15
April	6,150	1,565	2,244	4.23	4.72
May	2,550	917	1,172	2.21	2.55
June	3,846	765	1,631	3.07	3.43
July	5,430	765	1,233	2.32	2.67
August	1,022	420	729	1.37	1.58
September	575	364	408	.77	.86
October	765	310	389	.73	.84
November	1,180	364	512	.96	1.07
December	622	364	421	.79	.91
The year	14,430	310	1,337	2.52	33.81
1904					
January	2,097	358	575	1.08	1.24
February	2,410	430	791	1.49	1.61
March	2,694	603	1,063	2.00	2.31
April	1,870	608	828	1.55	1.73
May	2,165	393	659	1.24	1.43
June	1,330	326	549	1.03	1.15
July	772	296	408	.768	.885
August	2,550	269	453	.853	.983
September	296	184	220	.414	.462
October	202	184	187	.352	.406
November	650	184	215	.405	.452
December	1,870	269	524	.987	1.14
The year	2,694	184	539	1.01	13.80
1905					
January	9,390	400	1,140	2.15	2.48
February	9,030	520	2,264	4.26	4.44
March	3,630	785	1,144	2.15	2.48
April	1,560	695	858	1.62	1.81
May	3,990	718	1,147	2.16	2.49
June	1,560	650	752	1.42	1.58
July	2,910	560	887	1.67	1.92
August	1,870	500	759	1.43	1.65
September	3,270	360	652	1.23	1.37
October	1,275	325	490	.923	1.06
November	830	325	394	.742	.828
December	12,050	400	2,026	3.82	4.40
The year	12,050	325	1,043	1.96	26.51
1906					
January	6,870	970	1,990	3.75	4.32
February	1,380	970	1,130	2.13	2.22
March	12,500	920	2,480	4.67	5.38
April	2,550	1,120	1,550	2.92	3.26
May	3,990	830	1,260	2.37	2.73
June	9,030	920	1,710	3.22	3.59
July	4,850	785	1,510	2.84	3.27
August	3,990	1,020	1,320	2.49	2.87
September	3,990	1,020	1,380	2.60	2.90
October	3,990	970	1,710	3.22	3.71
November	17,700	830	2,140	4.03	4.50
December	5,430	1,120	1,670	3.15	3.63
The year	17,700	785	1,650	3.12	42.38

NOTE.—Values are rated as follows: January, February, April to October, and December, are excellent; March and November are only good, owing to liability of backwater at high stages.

CARTECAY RIVER NEAR CARTECAY.

This station was established June 27, 1904, by M. R. Hall. It is located at the Cartecay Bridge on the public road 6 miles upstream from Ellijay and 1½ miles northwest of Cartecay. Turkey Creek enters from the south side and Owltown Creek from the north side between this point and Ellijay. There is probably no considerable interference from dams above the station.

The channel is straight for about 500 feet above and below the station. The current is swift. Both banks are high, but are subject to overflow. The bed of the stream is composed of bowlders and is probably permanent, the water flowing in one channel.

Discharge measurements are made from the downstream side of the single 60-foot span wooden bridge. The bridge has an approach on the right bank of 24 feet and on the left bank of 26 feet. The initial point for soundings is the edge of the abutment on the right bank, downstream side.

The gage is a vertical 10-foot timber, fastened to the sill and downstream post of the trestle bent at the right bank. It is read once each day by S. A. Burrell. The bench mark is the top of the downstream end of the first floor beam from the right bank, marked by nails and white paint; elevation, 16.50 feet above the datum of the gage.

Discharge measurements of Cartecay River near Cartecay.

Date	Gage height	Discharge	Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*	1905	*Feet*	*Sec.-ft.*
May 9	1.30	176	April 19	1.20	167
June 27	.90	86	June 22	1.45	230
August 31	.85	94	October 16	1.07	137
October 12	.65	70			
December 13	.80	78			

Daily gage height, in feet, of Cartecay River near Cartecay.

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904							1904						
1	1.1	1.1	0.8	0.9	0.75	1.15	17	1.3	1.3	1.3	0.7	0.75	0.9
2	1.1	1.2	.85	.....	.8	.9	18	1.5	1.25	2.1	.7	.8	.85
3	1.3	2.4	1.2	.....	.8	1.1	19	3.05	3.55	.9	.75	.85	.8
4	1.5	1.65	1.1	.....	.85	1.0	20	3.05	2.15	.9	.6	.9	.75
5	1.7	2.3	.9	.....	.9	1.5	21	2.2	1.9	.85	.65	.8	.75
6	1.75	2.85	.9	.....	.8	1.2	22	1.7	1.7	.8	.75	.95	.7
7	3.3	1.9	.85	.....	.85	1.2	23	1.6	1.3	2.3	.75	.95	.7
8	2.2	1.7	.8	.....	.9	1.1	24	2 2	1.25	2.15	.75	.9	.9
9	1.4	1.5	1.4	.....	.95	1.0	25	1.95	3.35	.95	.65	.85	1.1
10	1.3	1.45	.85	.....	.9	1.0	26	1.3	2.7	1.9	.6	.8	.9
11	1.35	1.4	.8	.....	1.2	.9	27	1.25	1.6	.8	.65	.8	.9
12	3.5	2.65	.8	.65	1.3	.9	28	1.7	1.15	.8	.7	.85	2.5
13	5.4	2.1	.85	.....	1.1	.8	29	1.25	1.1	1.2	.75	.85	2.2
14	2.3	1.7	.8	.....	.95	.8	30	1.1	.9	.9	.7	1.3	1.2
15	2.1	1.5	75	.....	.9	.85	31	.....	.....	.85	.....	.7	.....
16	1.8	1.35	.8	.....	.8	.85							.9

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	0.9	0.95	1.45	1.3	1.7	1.5	1.6	1.1	1.15	1.3	0.9	1.1
2	.95	.95	1.4	1.3	1.7	1.4	1.5	1.0	1.15	1.2	1.3	1.3
3	.95	.9	1.4	1.25	1.6	1.35	1.4	1.0	1.2	1.2	1.2	4.6
4	.95	.85	1.3	1.2	1.5	1.2	1.4	.95	1.25	1.7	1.2	3.2
5	.9	.9	1.35	1.6	1.45	1.2	1.35	.9	1.2	1.4	1.1	2.0
6	1.55	1.1	1.4	1.5	1.4	1.15	1.2	.9	1.2	1.3	1.1	1.8
7	1.2	1.1	1.45	1.3	1.4	1.1	1.2	.95	1.15	1.2	1.1	1.4
8	1.1	2.1	1.3	1.25	1.9	1.15	1.2	1.6	1.1	1.1	.95	1.3
9	1.1	2.9	1.3	1.2	1.6	1.1	1.15	1.9	1.15	1.0	.95	2.5
10	1.2	2.8	1.65	1.1	1.5	1.1	1.15	1.8	1.15	1 0	.9	2.0
11	1.2	1.6	1.3	1.1	1.25	1.1	1.2	1.6	1.2	1.0	.9	1.7
12	2.7	1.4	1.3	1.7	1.3	1.0	4.3	1.5	1.9	1.1	.85	1.6
13	2.5	2.8	1.25	1.4	1.3	1.0	3.6	1.5	1.4	1.1	.85	1.6
14	1.7	1.6	1.2	1.3	1.25	1.1	2.7	1.6	1.3	1.1	.9	1.6
15	1.6	1.5	1.2	1.35	1.3	1.1	2.1	1.6	1.2	1.0	.9	1.5
16	1.4	1.5	1.2	1.3	2.1	1.6	1.9	3.6	1.2	.9	.9	1.5
17	1.45	1.4	1.25	1.3	1.6	1.4	1.3	2.9	1.15	.9	.9	1.4
18	1.35	1.4	1.25	1.3	1.4	1.2	1.3	2.1	1.15	.95	1.0	1.4
19	1.3	1.35	1.2	1.25	1.4	1.2	1.25	1.6	1.1	1.0	1.7	1.4
20	1.2	6.5	1.6	1.25	1.3	1.2	1.25	1.5	1.1	1.0	1.5	2.0
21	1.2	3.6	2.6	1.25	1.3	1.6	1.2	1.4	1.1	.9	1.3	1.7
22	1.15	2.2	1.3	1.2	2.6	2.3	1.2	1.35	.9	1.1	1.1	1.7
23	1.15	1.9	1.6	1.2	1.3	1.9	1.2	1.3	.9	1.1	1.1	1.6
24	1.2	1.7	1.5	1.25	1.7	1.6	1.1	1.3	.9	1.1	1.1	1.5
25	1.1	1.7	1.5	1.2	1.6	1.5	1.1	1.25	.95	1.3	1.5	1.4
26	1.1	1.65	1.5	1.25	1.6	1.5	1.1	1.2	.95	1.2	1.4	1.4
27	1.0	1.65	1.4	1.5	1.5	1.4	1.2	1.2	.9	1.1	1.3	1.3
28	1.0	1.5	1.3	1.3	1.4	1.4	1.2	1.2	1.0	1.1	1.2	1.3
29	1.0	.....	1.3	1.9	1.4	1.3	1.15	1.15	1.0	1.1	1.4	1.25
30	1.15	.....	1.6	1.8	1.35	1.9	1.15	1.1	1.6	.9	1.2	1.2
31	1.1	.....	1.4	.....	1.6	.....	1.15	1.1	.....	.9	.....	1.2

Rating table for Cartecay River near Cartecay, from July 1, 1904, to December 31, 1905.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.60	56	1.00	118	1.40	215	1.80	366
.70	67	1.10	134	1.50	249	1.90	411
.80	80	1.20	158	1.60	286	2.00	456
.90	95	1.30	185	1.70	326		

a As the highest measurement is at 1.5 feet the table has not been extended beyond 2 feet. For that reason no monthly estimates have been made. The table as given covers the low-water period.

ELLIJAY RIVER, AT ELLIJAY.

This station was established June 28, 1904, by M. R. Hall. It is located at a wagon bridge about one-half mile east of Ellijay, and about the same distance above the junction of Ellijay and Cartecay rivers.

The channel is straight for about 500 feet above and below the station. The right bank is about 12 feet high and the left about 10 feet. Both banks are bordered by fields and are subject to overflow. There is one channel, broken by one wooden pier. The bed of the stream is composed of rock, and the current ranges from very swift above the station to sluggish below.

Discharge measurements are made from the open wooden wagon bridge, which has two 40-foot spans and 50-foot approaches on each bank. The initial point for soundings is the end of the bridge at the right bank on the downstream side.

A gage staff, reading from 2 to 6 feet, is nailed to the downstream vertical post at the right bank, and a bench mark established for reference. Regular gage readings are not maintained. The bench mark is a small nail and white paint mark in the downstream vertical post at the right bank; elevation, 7.00 feet above datum of the assumed gage.

Discharge measurements of Ellijay River at Ellijay.

Date	Gage height	Discharge	Date	Gage height	Discharge
1903	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft.*
December 9	.....	76	December 14	1.20	66
1904			1905		
May 10	1.80	154	April 18	1.70	145
June 28	1.35	94	June 21	1.78	156
August 30	1.22	68	October 16	1.42	114
October 12	1.07	42			

MOUNTAINTOWN CREEK NEAR ELLIJAY.

This station was established May 10, 1904, by O. P. Hall. It is located at the covered bridge, known as Charles Bridge, about 4 miles west of Ellijay, and about the same distance above the mouth of the creek. This bridge consists of a single span of 54 feet, with short trestle approaches at either end. Discharge measurements are made either from the bridge, where the meter is lowered through

holes in the floor, or at a foot log half a mile below. The initial point for soundings is the end of the trestle approach at the right bank.

The channel is straight for about 500 feet above and 100 feet below the station. Both banks are high and not liable to overflow. The bed of the stream is rocky. The water is shallow and swift at the bridge, the better section being at the foot log below the bridge.

Gage heights are determined directly from the bench mark, which is a nail driven into the vertical post of the main bent under the right end of the bridge 6 feet above the top of the mud sill of the bent; elevation, 7.00 feet above the datum of the assumed gage.

Discharge measurements of Mountaintown Creek near Ellijay.

Date	Gage height	Discharge	Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*	1905	*Feet*	*Sec.-ft.*
May 10	1.17	157	April 19	1.05	152
August 31	.85	79	October 17	.98	92
October 12	.75	31			

TALKING ROCK CREEK NEAR CARTERS.

This station was established May 26, 1904, by O. P. Hall. It is located about 3 miles above the mouth of Talking Rock Creek and about the same distance east of Carters. Numerous measurements of the creek had previously been made in connection with measurements at the Coosawattee River station.

Both banks are high and will probably not overflow. There is one channel at all stages. The section is a good one. Discharge measurements are made from a boat just above R. L. Hill's boat landing, or by wading at a shoal a short distance below. Gage heights are determined directly from the bench mark, which is a nail in a large elm tree on the left bank at R. L. Hill's boat landing; elevation, 7.50 feet above the datum of the assumed gage.

Discharge measurements of Talking Rock Creek near Carters.

Date	Gage height	Discharge	Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*	1905	*Feet*	*Sec.-ft.*
May 26	1.24	49	June 6	1.59	143
June 25	1.06	34	September 28	1.16	51
August 23	1.07	40			

BIG CEDAR CREEK NEAR CAVESPRING.

This station was established in 1905. It is located at the wagon bridge about 3 miles north of Cavespring, 1 mile below the Southern Railway bridge, and half a mile below the mouth of Little Cedar Creek.

The channel is straight for about 200 feet above and 300 feet below the bridge. The right bank is low and will overflow to the extent of the 100-foot wooden approach. The left bank is high and will not overflow. The bed is of sand and mud, and is therefore probably shifting. The current is sluggish at low stages. Measurements are made from the single iron span 91 feet long. The initial point for soundings is the end of the bridge at the left bank, upstream.

Gage heights are determined directly from the bench mark, which is the top of the upstream end of the second floor beam from the right-bank end of the bridge; elevation, 20.00 feet above the datum of the assumed gage.

Discharge measurement of Big Cedar Creek near Cavespring.

Date	Gage height	Discharge
1905	Feet	Sec.-ft.
July 25	2.70	117

TALLAPOOSA RIVER AT BUCHANAN BRIDGE, NEAR TALLAPOOSA.

This station was established October 21, 1901, by M. R. Hall. It is located at Buchanan Bridge, about 4 miles north of Tallapoosa, and about 2 miles above the station on Tallapoosa River at Adderhold Bridge. Discharge measurements are made from the single-span iron highway bridge, which has a trestle approach of 100 feet on the right bank and of 50 feet on the left bank. The initial point for soundings is the end of the bridge at the right bank, downstream side. The channel is straight for about 800 feet above and 1,000 feet below the station. The current is moderate above and swift below the measuring section and the banks rarely overflow. The bed of the stream is composed of rock and gravel, free from vegetation, and is probably constant; there is but one channel at

COTTON MILL OF THE JOHN P. KING MANUFACTURING COMPANY, AUGUSTA, GEORGIA.

all stages, broken at the higher levels by the piers and trestlework of the bridge. The bench mark is the top of the downstream end of the center floor beam, the third from either end; elevation, 25.25 feet above gage datum.

Discharge measurements of Tallapoosa River at Buchanan Bridge, near Tallapoosa.

Date	Gage height	Discharge	Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft.*
March 26	1.55	180	August 31	0.81	59
May 14	.83	39	September 26	.71	33
July 19	.65	22	1906		
			June 29	1.09	97

TALLAPOOSA RIVER AT ADDERHOLD BRIDGE, NEAR TALLAPOOSA.

This station was established on January 7, 1901, by M. R. Hall. It is located at Adderhold Bridge, about 2 miles north of Tallapoosa, and about 2 miles below the station on Tallapoosa River at Buchanan Bridge. Discharge measurements are made from the downstream side of the single-span iron highway bridge, which has trestle approaches at either end. The initial point for sounding is the end of the bridge at the left bank, downstream side. The channel is straight for about 300 feet above and 500 feet below the station. The current is swift above and sluggish below. Both banks are wooded and are subject to overflow under the trestle approaches during high water. The bed of the stream is composed of sand, and is probably constant. There is but one channel at all stages, broken during the higher levels by the piers and trestlework of the bridge. The bench mark is the top of the downstream end of the first floor beam from the left bank; elevation, 22.00 feet above gage datum.

Discharge measurements of Tallapoosa River at Adderhold Bridge, near Tallapoosa.

Date	Gage height	Discharge	Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft.*
March 9	1.20	274	July 19	0.30	32
March 26	1.22	218	August 31	.65	80
May 14	.60	59	September 26	.89	50

MISCELLANEOUS MEASUREMENTS IN MOBILE RIVER DRAINAGE BASIN.

The following is a list of miscellaneous discharge measurements made in Mobile River drainage basin in Georgia:

Big Cedar Creek.—This stream enters Coosa River about 6 miles northwest of Cavespring. Measurements were made from the upstream side of a single-span steel bridge 2½ miles northwest of Cavespring and one-fourth mile above the Southern Railway bridge. The bench mark is the top of the second iron floor beam from the right end of the bridge, upstream side, 17.00 feet above the datum of the assumed gage.

January 21, 1904: Width, 62 feet; area, 207 square feet; mean velocity, 0.37 foot per second; gage height, 3.13 feet; discharge, 78 second-feet.

September 28, 1904: Width, 67 feet; area, 177 square feet; mean velocity, 0.29 foot per second; gage height, 3.00 feet; discharge, 51 second-feet.

July 25, 1905: Width, 68 feet; area, 186 square feet; mean velocity, 0.42 foot per second; gage height, 3.13 feet; discharge, 77 second-feet.

July 14, 1906: Width, 77 feet; area, 230 square feet; gage height, 3.32 feet; discharge, 124 second-feet.

A measurement was made May 14, 1906, from a single-span iron wagon bridge, 3 miles north of Cavespring, near Wetsels Ford. The bench mark is the top of the upstream end of the second cross beam from the right end of the bridge; elevation, 20 feet above the datum of the assumed gage.

Width, 61 feet; area, 239 square feet; gage height, 2.92 feet; discharge, 161 second-feet.

Cave Spring.—This spring is tributary to Little Cedar Creek. A measurement was made January 21, 1904, at the footbridge at Cavespring. The water surface was 16½ inches below the upstream side of the bridge floor, 6 inches from the right end of the bridge.

Width, 13 feet; area, 5.6 square feet; mean velocity, 0.94 foot per second; discharge, 5.3 second-feet.

Conasauga River.—This stream is a tributary of Oostanaula River. A measurement was made November 25, 1904, from a boat at Fites Ferry, 2 miles from Resaca, Ga. The bench mark is a small nail in a large leaning willow tree on the left bank, about 200 feet below the ferry, 5.00 feet above the datum of the gage.

Width, 130 feet; area, 219 square feet; mean velocity, 0.74 foot per second; gage height, 2.65 feet; discharge, 163 second-feet.

Etowah River.—A measurement was made July 27, 1904, at Fields Bridge, about 6 miles below Canton. The bench mark is a chisel cut and white paint mark at intermediate post, the second floor beam of the main span from the left end of the bridge, downstream side, 36.00 feet above the datum of the gage.

Width, 89 feet; area, 307 square feet; mean velocity, 1.05 feet per second; gage height, 2.67 feet; discharge, 322 second-feet.

February 23, 1906: Width: 337 feet; area, 1.820 square feet; gage height, 5.63 feet; discharge, 1.780 second-feet.

Measurements were also made at Hardins Bridge, 4 miles south of Kingston, Ga., as follows:

January 24, 1904: Width, 188 feet; area, 1,178 square feet; mean velocity, 1.60 feet per second; gage height, 3.45 feet; discharge, 1,894 second-feet.

April 14, 1904: Width, 188 feet; area, 1,154 square feet; mean velocity 1.21 feet per second; gage height, 3.27 feet; discharge, 1,401 second-feet.

July 29, 1904: Width, 185 feet; area, 1,007 square feet; mean velocity, 0.62 foot per second; gage height, 2.56 feet; discharge, 625 second-feet.

A 5-foot section of gage rod is fastened to a tree on the left bank.

Jack River.—A measurement was made near Alaculsy, October 5, 1904, just above the falls, about 5 miles above the mouth of the river and 23 miles from Blue Ridge, Ga.

Width, 7 feet; area, 7 square feet; mean velocity, 1.86 feet per second; discharge, 13 second-feet.

Little Cedar Creek.—This stream enters Big Cedar Creek about 2 miles north of Cavespring, Ga. A measurement was made September 28, 1904, from the bridge near Cavespring. The bench mark is the top of the first floor beam from the right bank, downstream end, 9.00 feet above the datum of the gage.

Width, 30 feet; area, 18 square feet; mean velocity, 1.00 foot per second; gage height, 1.27 feet; discharge, 18 second-feet.

Little Cedar Creek at Cavespring, Ga.—A measurement was made May 14, 1906, at a single-span iron footbridge on the road to the Cave Spring on the main street of the city. The bench mark is the top of the downstream end of the first iron cross beam from

the right end of the bridge; elevation, 8 feet above the datum of the assumed gage.

Width, 32 feet; area, 14.7 square feet; gage height, 1.26 feet; discharge, 21.7 second-feet.

A measurement was made May 14, 1906, at a wagon bridge one-fourth mile north of Cavespring, Ga. The bench mark is the top of the downstream end of the first cross beam from the left end of the bridge; elevation, 7 feet above the datum of the assumed gage.

Width, 31 feet; area, 15 square feet; gage height, 1.01 feet; discharge, 31 second-feet.

Oothkalooga Creek.—This stream is a tributary of Oostanaula River. A measurement was made May 6, 1904, at a bridge about 1 mile from the mouth of the creek and 1 mile west of Calhoun. The bench mark is the downstream end of the top of cross timber on middle bent, 16.00 feet above the datum of the gage.

Width, 45 feet; area, 50 square feet; mean velocity, 0.64 foot per second; gage height, 2.15 feet; discharge, 32 second-feet.

Pinelog Creek.—This stream flows into Sallacoa Creek, a tributary of Coosawattee River. A measurement was made May 5, 1904, at Butler's bridge, about 1 mile above the mouth, near Cash. The bench mark is the top of the downstream end of the cross timber on first bent from left bank, 17.00 feet above the datum of the gage.

Width, 54 feet; area, 150 square feet; mean velocity, 0.27 foot per second; gage height, 2.80 feet; discharge, 41 second-feet.

Sallacoa Creek.—This stream is a tributary of Coosawattee River. A measurement was made May 5, 1904, at Covington's bridge, about 4 miles above the mouth of Pinelog Creek and 4 miles east of Cash, Ga. The bench mark is the upstream end of the top of cross timber over the first bent from the left bank, 16.00 feet above the datum of the gage.

Width, 42 feet; area, 164 square feet; mean velocity, 0.15 foot per second; gage height, 2.60 feet; discharge, 24 second-feet.

Tallapoosa River.—A measurement was made near Tallapoosa, on March 9, 1904, from the wooden bridge near the Southern Railway and one-half mile below Bentley's dam, below the mouth

of Walkers Creek. The bench mark is the top of the upper end of the floor beam on top of wooden pier, 106 feet from the initial point for soundings, 25.00 feet above the datum of the gage.

Width, 89 feet; area, 517 square feet; mean velocity, 0.74 foot per second; gage height, 6.25 feet; discharge, 381 second-feet.

RIVER SURVEYS IN MOBILE RIVER DRAINAGE BASIN

ETOWAH RIVER

The following list of elevations of water surface on Etowah River from Rome up to the mouth of Little River are from a survey made in 1879 by Ernest Ruhl, of the Corps of Engineers, U. S. Army. The elevations are based on an assumed datum, which is about 376 feet above sea level.

Elevations on Etowah River from Rome to mouth of Little River.

Distance	Description of points	Elevation
Miles		*Feet*
0.0	Rome, Ga., Broad Street Bridge, water surface	276
0.3	Rome, Ga., Silver Creek, mouth, water surface	276.8
0.5	Rome, Ga., Southern Railway bridge, water surface	276.8
1.0	Water surface	278
2.5	Water surface	282
3.0	Water surface	283.1
3.7	Water surface	285
4.3	Water surface	286
4.7	Water surface	286.3
5.5	Water surface	288.3
5.7	Water surface	288.5
5.8	Water surface	290
6.3	Freemans Ferry, water surface	292.5
7.0	Water surface	295
7.5	Dykes Creek, 0.3 mile below mouth of, water surface	296.5
8.0	Water surface	298 8
9.0	Water surface	299.7
9.3	Water surface	301.1
9.5	Water surface	302
9.8	Water surface	302.5
11.6	Bass Ferry	.....
12.0	Water surface	303.2
12.5	Water surface	304.5
13.0	Water surface	307.7
13.3	Water surface	308.5
14.0	Water surface	309.5
14.5	Thomas Creek, 0.3 mile below mouth of, water surface	310
15.5	Water surface	310.1
15.8	Hanleys Ferry, half mile below, water surface	310.5
16.5	Water surface	311.6
16.7	Water surface	313.1
17.0	Water surface	317.9
17.3	Water surface	319
18.0	Water surface	319.5
18.2	Water surface	321
19.0	Woolleys Bridge, water surface	321.8
19.5	Water surface	322.3
20.1	Conasene Creek, water surface	323.1
20.2	Water surface	324
20.4	Water surface	325
20.5	Two Run Creek, mouth of, water surface	326.8
21.7	Water surface	327.8
22.0	Water surface	330
22.8	Water surface	331
22.5	Water surface	331.1
22.6	Water surface	332

Elevations on Etowah River from Rome to mouth of Little River—Continued.

Distance	Description of points	Elevation
Miles		*Feet*
22.9	Dodds Slough, water surface	
23.0	Water surface	332.1
23.2	Water surface	333
23.5	Water surface	333.7
23.8	Water surface	340
24.5	Water surface	341.7
25.0	Water surface	342.5
25.3	Water surface	344.4
26.0	Water surface	344.9
27.5	Water surface	346.6
27.8	Water surface	346.7
28.5	Water surface	349
29.2	Water surface	350.7
29.5	Water surface	351.6
29.7	Water surface	352
30.5	Water surface	354
30.7	Water surface	355.53
31.0	Uharlee Creek, 0.4 mile below mouth of, water surface	356
31 8	Water surface	356.1
32.8	Water surface	358.2
34.0	Water surface	360
34.5	Water surface	362
35.0	Richland Creek, mouth of, water surface	364.2
35.5	Water surface	367
37.0	Water surface	367.3
37.5	Water surface	368
38.6	Rockmart Railroad bridge, water surface	369
38.8	Pettits Creek, mouth, and Rowlands ferry, 0.2 mile below, water surface	369.3
39.2	Water surface	371
39.5	Water surface	371.5
40.8	Water surface	375.5
41.2	Pumpkinvine Creek, 0.7 mile below mouth, water surface	376.7
42.2	Water surface	377.9
42.5	Water surface	379.6
42.7	Water surface	380.4
43.5	Water surface	383
43.9	Tumlins milldam in 1879, foot of, water surface	383.5
43.9	Tumlins milldam in 1879, head of, water surface	388
44.2	Water surface	388
44.4	Wagon bridge, water surface	388.9
45.0	Jefferson milldam, foot of, water surface	390.5
45.0	Jefferson milldam, head of, water surface	395.5
45.1	Western and Atlantic Railroad bridge, water surface	395.5
46.0	Water surface	395.5
47.0	Small branch, near mouth, water surface	398
47.1	Water surface	400
47.8	Water surface	405
48.0	Water surface	410.5
48.5	Near mouth of Altona Creek, water surface	418.4
48.8	Water surface	422
49.0	Near mouth of Stamp Creek, water surface	435.5
50.0	Water surface	452.3
50.5	Water surface	466.3
51.0	Websters Ferry, water surface	468.1
51.2	Water surface	469.4
52.0	Water surface	477.3
52.4	Water surface	480
52.8	Illinois Creek, half mile below mouth, water surface	486.4
53.7	Water surface	488
54.5	Water surface	488.3
54.8	Gaults Ferry, half mile below, water surface	489.2
55.5	Owl Creek, 0.2 mile below mouth, water surface	489.3
56 7	Water surface	491
57.2	Water surface	491.1
57.7	Water surface	491.9
58.0	Lovengoods Bridge, 0.8 mile below, water surface	494.8
59.7	Water surface	497
59.8	Water surface	497.6
60.4	Water surface	500.1
60.7	Water surface	502.5
61.7	Water surface	502.5
62.2	Wheelers milldam, foot of	504.5
62.3	Wheelers milldam, head of	508
63.0	Little River, mouth, water surface	508

SURVEY OF COOSAWATTEE RIVER

From May 29 to July 12, 1900, a survey of a part of Coosawattee River was made, under the supervision of B. M. Hall, resident hydrographer, by Olin P. Hall, who was field assistant, levelman, and topographer. No camp outfit was carried. The levelman read his distances with the stadia, and identified land lines and tributaries from a township or district map of the old State survey. This map embraces two land districts, the eleventh and the twenty-fifth. The eleventh was found to be correct, but the twenty-fifth was incorrect. The survey began at the Geological Survey Gaging station at Carters, with zero of the gages as a level datum, and extended up the river to Ellijay, a distance of 24 miles. The total fall between the two places was found to be 581.6 feet. This 24 miles of river cuts through the Cohutta Mountains and enters the Paleozoic formation at Carter's mill, about 2 miles above the gaging station, which is the head of navigation on the river. It is along a continuous shoal, and the conditions are such that water power can be developed at any point desired. The only utilized power is at Carter's mill, where there is an 8-foot dam across the river.

Elevations on Coosawattee River from Carters to Ellijay.

Distance	Description of points	Elevation above gage datum
Miles		*Feet*
0.0	Zero of gage at Carters, Ga.	0.6
0.0	Water surface at gaging station, May 29, 1900	1.8
0.3	Mouth of Talking Rock Creek, bench mark	15.54
0.3	Mouth of Talking Rock Creek, water surface	3.5
1.75	Below Carter's dam, water surface	17.56
1.75	Above Carter's dam, water surface	25.73
1.75	Small birch on right bank of river	28.40
2.25	Mouth of Fishers Creek, water surface	26
2.5	County line between Murray and Gilmer counties, water surface	49.2
3.25	Mouth of small branch, water surface	51.27
3.25	Small maple 30 feet beyond branch	55.25
4.2	Mouth of Camp Branch, water surface	69.65
4.2	Pine root at mouth of Camp Creek	72.35
4.4	Mouth of Harris Creek, water surface	79.19
4.4	Root of small poplar opposite mouth of Harris Creek	82.61
5.62	Mouth of Wurley Creek, water surface	129.52
5.62	Large basswood	135.01
5.72	1,000 feet above Wurley Creek, water surface	139.37
6.1	Mouth of Crawfords Creek, 37½ feet fall in 2,300 feet, water surface	186.89
6.1	Small white oak opposite Crawfords Creek	191.88
9.0	Opposite mouth of Tails Creek, water surface	316.84
9.0	Large pine 50 feet south of Tails Creek	323.44
10.25	Opposite mouth of Flat Creek, water surface	344.14
10.25	Small white oak opposite Flat Creek at John Goble's boat landing	354.84
10.5	Water surface	350.38
10.9	Below bend of river, water surface	363.87
11.45	Foot of shoals, water surface	375.09
12.25	Mouth of small branch from the west, water surface	409.18
13.25	Line between land districts 25 and 11, water surface	440.09
14.0	Mouth of Mountaintown Creek, water surface	456.87
14.0	Small white oak on north bank of Mountaintown Creek	464.97
16.4	Gentry's boat landing, on lot No. 176, water surface	510.30
17.65	260 feet below mouth of Early Creek, water surface	532.21
18.18	Smith's boat landing, water surface	538.91
18.22	Levi Smith's ford, water surface	547.18

Elevations on Coosawattee River from Carters to Ellijay—Continued.

Distance	Description of points	Elevation above gage datum
Miles		*Feet*
18.25	Root of small red oak 220 feet above ford	546.81
19.7	Mouth of branch near corner of lots Nos. 103, 104, 113 and 114, in eleventh district, water surface	557.08
22.8	Ford 100 feet below mouth of Mill Creek, water surface	577.09
23.3	Covered wagon bridge over Coosawattee River at Ellijay, Ga., water surface	581.4
23.3	Large oak on north bank 50 feet above bridge	590.75
23.6	Junction of Cartecay and Ellijay rivers, water surface	581.92
24.0	A. K. and N. R. R. bridge on Cartecay River, water surface	583.39
24.0	Center of stone block on top of south pier of railroad bridge	603.29
24.0	Base of rail on south end of railroad bridge	605.44
24.0	Base of rail on front of A. K. and N. R. R. depot at Ellijay, Ga	613.77

WATER POWER IN MOBILE RIVER DRAINAGE BASIN

ETOWAH RIVER

From Rome up to the Western and Atlantic railroad crossing, near Cartersville, a distance of 45 miles, Etowah River is mostly swift, but has no large shoals. The total fall is about 115 feet, which includes numerous small shoals. At a few places the fall is 5 or 6 feet in a mile or less, and at one place near Kingston the fall is 33 feet in 8½ miles. One and one-fourth miles below the railroad bridge, at the old Tumlin mill site, is the large corn mill of the Etowah Milling Company, utilizing about 6. feet of fall.

Immediately below the railroad bridge is an old mill site from which the mill and the 5-foot dam are entirely gone. About 2 miles above the railroad bridge begins a very fine water power, which was once partly developed and, before the Civil War, operated the Cooper Iron Works and a large flour mill. At present only the ruins of what is said to have been "a half-million dollar plant" are to be seen. This power has a fall of 90 feet in about 6 miles. Above this point there are numerous good small power sites, some of which are developed, but no great falls occur until the upper portion of the river is reached.

On Amicalola River, a large tributary of the Etowah, and on Etowah River above the mouth of the Amicalola, there are many excellent shoals having large amounts of fall.

HIWASSEE RIVER DRAINAGE BASIN

DESCRIPTION OF BASIN

Hiwassee River rises in the northern part of Georgia and flows into Tennessee River about 30 miles above Chattanooga, Tenn. Its principal tributaries are the Toccoa (Ocoee) and the Nottely. The United States Geological Survey has maintained, among others in this basin, the following stations: On Toccoa River near Blue Ridge, Ga.; on the Ocoee River at McCays, Tenn.; on Nottely River at Ranger, N. C., and on Hiwassee River at Murphy, N. C. The stations in North Carolina and Tennessee, mentioned above, are included here, as the data regarding the rivers in this basin will be valuable in estimating the flow of these streams at points above.

STREAM FLOW

HIWASSEE RIVER AT MURPHY, N. C.

This station was established July 26, 1896, by E. W. Myers. It is located at the highway bridge in Murphy, N. C., about 80 feet above the Atlanta, Knoxville and Northern Railroad bridge and one-half mile above the mouth of Valley River.

The channel is straight for about 500 feet above and below the station. The right bank is high and rocky and will not overflow. The left bank will overflow for a short distance around the abutment. The bed of the stream is rocky and rough, and makes soundings uncertain. The bed is permanent and the flow is rapid. Discharge measurements are made from the sidewalk on the upstream side of the single-span highway bridge. The bridge is 195 feet long, supported by stone abutments. The initial point for soundings is the end of the iron hand rail on the right bank, upstream side of the bridge.

A standard chain gage is fastened to the top of the downstream end of the first iron floor beam from the right bank in the space between the bridge floor and the lower chords; length of chain, 27.05 feet. It is read once each day by William Mingus. Bench marks were established as follows: (1) The downstream side of the

top of the stone pier at the right bank; elevation, 22.55 feet. (2) The top of the downstream end of the first iron floor beam from the right end of the bridge; elevation, 25.05 feet.

Discharge measurements of Hiwassee River at Murphy, N. C.

Date	Gage height	Discharge	Date	Gage height	Discharge
1896	*Feet*	*Sec.-ft.*	1901	*Feet*	*Sec.-ft.*
June 23	3.82	366	September 20	6.02	1,324
August 10	3.95	382	September 20	6.02	1,257
September 22	4.01	517	September 20	6.02	1,166
1897			September 20	6.02	1,246
August 20	5.33	528	September 20	6.03	1,182
October 14	4.76	267	November 8	5.25	462
October 29	4.71	258	December 13	5.32	480
1898			1902		
January 21	6.05	1,170	August 12	4.80	213
September 8	6.80	1,620	August 23	4.80	186
1899			September 18	4.80	198
February 28	7.50	2,150	September 18	4.80	216
June 23	5.17	400	October 24	4.87	260
June 23	5.30	436	October 24	4.90	271
September 28	4.93	304	1903		
September 28	5.00	345	March 6	6.60	1,747
December 7	5.10	317	March 28	6.75	2,226
December 29	5.50	613	April 28	6.04	1,302
1900			July 29	5.16	435
February 11	6.10	1,534	August 17	5.19	437
February 14	7.95	4,567	August 27	5.00	315
April 29	6.10	1,466	October 2	4.88	217
May 26	5.52	755	October 3	4.88	220
June 29	7.10	3,405	December 3	4.83	233
July 8	5.90	1,155	1904		
September 9	5.05	345	February 22	6.63	1,996
November 18	5.20	443	February 24	6.00	1,138
December 13	5.53	762	March 1	5.54	661
December 13	5.45	698	March 2	5.54	644
December 28	5.70	865	May 12	5.66	754
1901			June 29	5.53	639
February 24	5.70	725	August 29	5.10	344
April 17	6.15	1,522	October 6	4.80	183
May 12	6.40	2,107	December 15	5.02	287
July 12	5.45	665	1905		
August 16	8.00	4,974	April 15	5.84	896
September 20	6.02	1,106	June 13	5.88	517
			October 13	5.16	421

Daily gage height, in feet, of Hiwassee River at Murphy, N. C.

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1896							1896						
1	3.72	4.02	3.65	3.74	3.66	5.2	17	4.48	3.78	3.6	3.65	4.5	4.05
2	3.7	4.02	3.61	3.68	3.7	4.7	18	4.54	3.74	3.6	3.56	3.95	4.0
3	3.75	4.11	3.62	3.65	3.72	4.52	19	4.35	3.7	3.58	3.5	3.91	4.0
4	4.0	3.95	3.61	3.60	4.9	4.52	20	4.28	3.68	3.56	3.6	3.9	4.0
5	3.9	3.9	3.61	3.62	4.1	4.2	21	4.32	3.7	3.56	3.6	3.9	4.0
6	4.62	3.9	3.9	3.55	3.9	4.2	22	4.6	3.7	3.62	3.56	3.85	4.0
7	4.98	3.95	3.66	3.6	3.9	4.15	23	5.1	3.65	3.85	3.6	3.8	3.95
8	6.72	3.9	3.62	3.51	3.9	4.1	24	4.61	3.9	3.6	3.9	3.8	3.95
9	6.95	3.86	3.6	3.6	3.82	4.8	25	4.4	3.8	3.6	3.7	3.8	3.95
10	5.24	4.0	3.6	3.65	3.8	4.1	26	4.3	3.72	3.6	3.62	3.84	3.9
11	4.75	3.9	3.6	3.65	3.76	4.1	27	4.3	3.72	3.6	3.62	4.0	3.9
12	4.82	3.81	3.67	3.65	7.53	4.1	28	4.25	3.7	3.65	3.65	4.0	3.9
13	4.77	3.81	3.56	3.72	5.4	4.05	29	4.12	3.7	3.6	3.74	5.03	3.9
14	4.65	3.72	3.58	3.65	4.53	4.02	30	4.01	3.65	4.2	3.8	6.1	3.9
15	4.42	3.75	3.8	3.65	4.3	4.1	31	4.02	3.65	.....	3.82	.....	3.9
16	4.55	3.92	3.62	3.6	4.12	4.05							

Daily gage height, in feet, of Hiwassee River at Murphy, N. C.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897												
1	3.9	4.8	4.6	5.4	4.8	4.16	3.9	4.2	.....	.....	5.0	5.02
2	3.9	5.5	4.5	5.5	4.7	4.15	3.9	4.32	.....	.....	5.4	5.0
3	3.9	4.9	4.55	5.38	4.65	4.12	3.9	4.2	.....	.....	5.1	5.1
4	3.9	4.62	4.7	6.26	4.6	4.1	3.9	4.1	.....	.....	5.02	5.45
5	4.12	4.6	4.6	8.2	4.55	4.3	4.15	4.35	.....	.....	5.0	6.1
6	4.02	5.15	9.2	6.12	4.52	4.12	4.0	4.2	.....	.....	5.0	5.5
7	4.0	5.4	6.5	5.75	4.5	4.1	4.02	4.2	.....	.....	4.95	5.3
8	4.0	5.12	5.65	5.5	4.5	4.1	4.1	.....	.....	.....	5.0	5.2
9	3.92	5.1	5.4	6.1	4.5	4.22	4.1	.....	.....	.....	4.98	5.12
10	3.92	4.85	5.62	5.35	4.45	4.1	4.25	.....	.....	.....	5.0	5.1
11	4.0	4.85	5.5	5.3	4.52	4.02	4.15	.....	.....	.....	5.0	5.1
12	3.9	4.82	9.9	5.15	4.4	4.05	4.0	.....	.....	.....	4.95	5.0
13	3.92	4.82	6.85	5.05	5.0	4.05	3.98	.....	.....	.....	4.95	5.02
14	4.4	4.12	6.7	5.05	4.8	4.0	3 9	.....	.....	.....	5.0	6.2
15	4.6	4.7	6.12	5.5	4.6	4.0	3.85	.....	.....	.....	5.0	5.55
16	4.15	4.6	7.65	5.05	4.5	4.1	3.9	.....	.....	.....	5.0	5.3
17	4.55	.....	6.3	5.0	4.5	4.03	4.5	.....	.....	.....	4.95	5.28
18	4.4	.....	6.0	4.9	4.42	4.1	4.05	.....	.....	.....	4.95	5.2
19	4.4	.....	7.05	4.8	4.4	4.2	5.72	.....	.....	.....	4.95	5.4
20	5.1	.....	6.8	4.8	4.32	4.15	5.0	.....	.....	5.0	4.95	6.0
21	4.7	4.8	6.1	4.7	4.36	4.05	4.5	.....	.....	4.75	4.95	7.35
22	4.52	4.5	5.8	4.7	4.35	4.0	4.85	.....	.....	4.75	4.95	6.85
23	4.4	7.92	5.5	4.7	4.3	4.0	4.34	.....	.....	4.7	4.9	6.15
24	4.4	5.5	5.4	4.7	4.26	4.0	4.2	.....	.....	4.7	4.9	5.8
25	4.4	5.1	5.3	4.65	4.25	4.0	10.85	.....	.....	4.7	5.0	5.5
26	4.2	4.97	5.15	4.7	4.22	4.0	6.2	.....	.....	4.65	4.98	5.85
27	4.3	4.7	5.1	4.63	4.2	3.9	5.2	.....	.....	4.66	5.0	5.6
28	4.1	4.64	5.0	4.6	4.2	3.9	4.72	.....	.....	4.7	5.05	5.5
29	4.15	.....	4.9	4.6	4.2	4.3	4.52	.....	.....	4.72	5.0	5.4
30	4.15	.....	5.0	4.68	4.2	4.0	4.4	.....	.....	4.9	5.1	5.4
31	4.15	.....	4.9	.....	4.2	.....	4.25	.....	.....	4.87	.....	5.3
1898												
1	5.3	5.6	5.22	7.0	5.8	5.12	4.95	5.82	5.4	5.6	5.85	6.0
2	5.2	5.45	5.2	6.5	5.8	5.12	4.95	5.6	12.05	5.6	5.85	5.9
3	5.1	5.62	5.32	6.21	5.7	5.1	4.9	5.82	13.97	5.5	5.8	5.85
4	5.3	5.5	5.3	6.1	5.65	5.1	4.9	9.8	10.1	14.4	5.8	5.9
5	5.25	5.5	5.21	8.75	5.65	5.1	5.5	9.35	9.75	11.6	5.8	6.1
6	5.3	5.42	5.2	7.0	5.51	5.2	5.2	6.75	7.5	8.3	6.1	6.1
7	5.3	5.4	5.2	6.55	5.6	5.1	5.1	6.5	7.1	7.3	5.85	6.1
8	5.3	5.4	5.2	6.3	5.6	5.1	5.31	7.02	6.85	7.0	5.8	6.0
9	5.2	5.4	5.2	6.11	5.6	5.1	5.1	6.8	6.6	6.7	5.8	5.95
10	5.25	5.4	5.2	6.05	5.5	5.1	5.3	8.3	6.6	6.5	5.72	5.9
11	5.3	5.4	5.2	6.1	5.5	5.05	5.1	10.0	6.3	6.4	5.9	5.9
12	6.0	5.3	5.2	6.0	5.5	5.0	5.0	7.5	6.2	6.32	5.85	5.85
13	5.85	5.3	5.2	5.9	5.4	5.0	4.91	7.15	6.12	6.2	5.8	5.8
14	5.8	5.3	5.3	5.95	5.4	5.01	5.9	6.81	6.05	6.2	5.9	5.75
15	5.6	5 3	5.35	5.95	5.4	5.1	6.12	6.4	6.0	6.05	5.85	5.7
16	5.8	5.25	5.32	5.85	5.5	5.15	5.7	6.2	5.9	6.0	5.85	5.7
17	5.7	5.25	5.4	5.81	5.4	5.5	5.5	6.2	6.0	6.0	5.85	5.7
18	5.6	5.22	5.4	5.8	5.4	5.45	5.3	6.3	5.8	9.2	6.0	5.7
19	5.6	5.3	5.4	5.75	5.35	5.2	5.21	6.25	5.7	6.7	6.7	5.7
20	5.9	5.25	5.4	5.85	5.3	5.15	5.15	6.1	5.7	6.4	6.4	6.0
21	6.1	5.35	5.36	5.7	5.3	5.1	5.01	6.1	5.65	6.23	6.2	5.7
22	5.9	5.3	5.35	5.7	5.3	5.1	5.3	5.9	5.7	6.3	6.1	5.7
23	6.0	5.3	5.3	6.65	5.35	5.05	5.4	5.75	6.05	6.2	6.5	6.1
24	5.78	5.27	5.25	6.2	5.6	5.02	5.6	5.7	5.8	6.1	6.25	6.0
25	7.75	5.3	5.4	6.1	5.32	5.05	6.0	5.65	5.7	6.1	6.1	5.9
26	7.2	5.22	5.4	5.95	5.25	5.0	5.9	5.8	5.7	6.1	6.1	5.8
27	6.5	5.22	5.3	6.2	5.25	5.05	5.6	5.7	5.65	6.05	6.0	5.8
28	6.18	5.25	5.3	6.1	5.21	5.01	6.2	5.7	5.6	6.0	6.0	5.75
29	6.0	.....	11.1	6.0	5.2	5.0	5.8	5.6	5.6	6.0	6.2	5.7
30	5.82	.....	9.4	5.9	5.2	5.95	5.65	5.6	5.6	5.95	6.0	5.7
31	5.71	.....	7.7	.....	5.1	.....	6.2	5.6	.....	5.9	.....	5.9

Daily gage height, in feet, of Hiwassee River at Murphy, N. C.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1899												
1	5.8	5.6	6.9	6.8	5.85	5.3	(a)	5.2	5.4	4.9	4.85	5.1
2	5.7	5.7	6.6	6.6	5.82	5.3	(a)	5.2	5.25	4.8	4.9	5.35
3	5.7	5.7	6.7	6.55	5.8	5.3	(a)	5.2	5.5	4.85	4.9	5.1
4	5.65	14.0	6.32	7.2	5.8	5.25	(a)	5.15	5.3	4.75	4.9	5.1
5	5.6	9.6	7.4	6.55	6.1	5.25	(a)	5.12	5.2	4.8	4.9	5.1
6	5.7	9.45	6.75	6.55	5.8	5.25	(a)	5.2	5.1	4.9	4.9	5.02
7	6.3	9.9	6.5	6.5	5.85	5.1	(a)	5.2	5.1	4.9	4.9	5.0
8	6.0	7.85	6.4	6.7	5.7	5.1	5.2	5.2	5.15	5.7	4.9	5.1
9	5.9	7.2	6.4	6.6	5.7	5.2	5.1	5.12	5.05	5.15	4.9	5.05
10	5.8	6.75	6.3	6.5	5.7	5.15	5.1	5.15	5.0	5.0	4.9	5.1
11	5.8	6.6	6.2	6.4	5.62	5.1	5.05	5.15	5.2	5.02	4.9	5.1
12	5.9	6.55	6.1	6.3	5.62	5.32	5.0	5.1	5.1	5.0	4.85	9.1
13	5.7	6.3	6.1	6.2	5.6	5.3	5.0	5.1	5.0	4.9	4.85	6.3
14	5.7	6.4	6.75	6.2	5.55	5.5	5.0	5.05	5.0	4.8	4.9	5.82
15	5.75	6.4	10.8	6.1	5.6	5.35	5.0	5.2	5.0	5.0	4.9	5.7
16	5.75	6.3	8.75	6.1	5.5	5.25	5.0	5.32	4.9	5.0	4.9	5.5
17	5.75	6.25	7.5	6.05	5.5	5.3	5.1	5.2	5.0	5.0	4.9	5.4
18	5.7	6.25	7.1	6.0	5.5	5.2	5.3	5.1	5.0	4.95	4.9	5.4
19	5.7	6.0	18.4	6.0	5.6	5.2	5.2	5.0	5.0	5.1	4.85	5.3
20	5.7	6.1	8.7	6.0	5.5	5.15	5.1	5.0	5.1	5.0	4.85	5.5
21	5.7	6.1	7.6	6.0	5.45	5.1	5.3	5.0	5.0	5.0	4.9	5.4
22	5.6	6.1	7.2	5.9	5.4	5.1	5.3	5.0	5.0	4.9	4.9	5.35
23	5.6	6.0	8.15	5.9	5.4	5.1	5.3	5.0	5.0	4.9	5.4	5.3
24	5.52	5.92	7.0	5.9	5.42	4.85	5.2	5.0	5.0	4.9	5.12	6.3
25	5.65	6.1	6.8	6.7	5.4	4.95	5.2	5.1	5.0	4.9	5.1	5.7
26	5.6	6.0	6.6	6.1	5.4	5.05	6.8	5.05	5.0	4.9	5.75	5.6
27	5.6	9.1	6.52	6.0	5.35	5.0	5.75	5.25	5.02	4.9	5.4	5.5
28	5.6	7.3	6.5	6.0	5.35	5.0	5.9	5.45	5.0	5.0	5.3	5.55
29	5.5	.....	6.9	5.9	5.32	5.0	.....	5.1	5.0	5.1	5.2	5.5
30	5.5	.....	6.7	5.9	5.32	5.0	.....	5.1	4.88	4.9	5.1	5.35
31	5.9	.....	7.8	.....	5.3	.....	.....	5.7	.....	5.0	.....	5.4
1900												
1	5.5	5.12	7.0	5.9	6.1	5.4	6.8	5.8	5.35	5.0	5.2	5.4
2	5.2	5.3	6.5	5.9	6.0	5.4	6.6	5.4	5.2	4.9	5.25	5.45
3	5.51	5.35	6.25	5.9	6.0	5.6	7.0	5.4	5.15	5.0	6.2	5.4
4	5.3	5.4	6.1	6.7	5.9	5.8	6.4	5.4	5.1	5.1	5.6	7.2
5	5.3	5.6	6.0	6.1	5.9	5.5	6.2	5.3	5.2	5.1	5.4	6.4
6	5.2	5.4	6.0	6.05	5.8	6.1	6.0	5.3	5.15	5.05	5.35	6.0
7	5.2	5.4	7.0	6.0	5.7	6.0	5.9	5.3	5.1	5.0	5.35	5.8
8	5.2	5.4	7.5	5.9	5.7	6.1	5.8	5.2	5.05	5.3	5.3	5.75
9	5.2	6.72	7.4	5.85	5.7	6.1	6.2	5.2	5.05	5.1	5.25	5.6
10	5.2	6.02	6.9	5.8	5.7	6.3	5.7	5.2	5.0	5.05	5.25	5.6
11	5.3	6.1	6.6	6.1	5.7	6.1	5.7	5.2	5.0	5.0	5.2	5.5
12	6.3	6.1	6.4	6.3	5.65	6.1	5.8	5.2	5.0	4.9	5.25	5.5
13	5.8	12.6	6.3	6.1	5.6	6.6	5.8	5.2	5.0	5.3	5.2	5.45
14	5.6	7.7	6.12	6.0	5.6	6.1	5.7	5.2	5.05	5.1	5.25	5.45
15	5.6	7.15	6.05	6.0	5.6	5.8	5.6	5.2	7.0	5.0	5.2	5.4
16	5.5	6.5	6.3	5.9	5.5	5.8	5.6	5.1	6.45	5.0	5.15	5.4
17	5.4	6.2	6.0	5.8	5.4	6.2	5.6	5.3	5.7	4.9	5.2	5.4
18	5.45	5.9	6.0	6.2	5.5	6.0	5.6	5.2	5.45	4.8	5.15	5.3
19	5.9	5.9	6.85	6.7	5.7	6.3	5.5	5.1	5.35	5.0	5.2	5.3
20	6.6	5.8	7.4	6.4	5.5	6.1	5.5	5.1	5.35	4.9	5.15	5.8
21	6.2	6.0	6.9	7.1	5.4	5.9	5.5	5.1	5.25	4.9	5.2	6.7
22	5.9	6.4	6.6	6.8	5.4	5.8	5.6	5.1	5.0	5.0	5.3	5.9
23	5.8	6.15	6.4	6.7	5.4	6.3	5.7	5.3	5.4	4.9	5.2	5.8
24	5.65	6.0	6.35	6.5	5.6	6.6	5.6	5.9	5.2	7.1	5.15	6.0
25	5.6	6.0	6.4	6.55	5.5	6.5	5.4	5.3	5.2	6.0	5.3	5.8
26	5.6	6.0	6.4	6.55	5.6	7.0	5.5	5.4	5.2	5.7	6.7	5.7
27	5.5	5.9	6.3	6.3	5.5	7.2	5.7	5.2	5.15	5.6	6.0	5.65
28	5.4	5.85	6.3	6.2	5.5	7.1	5.9	5.15	5.15	5.4	5.7	5.6
29	5.4	.....	6.05	6.2	5.4	7.0	5.7	5.15	5.1	5.3	5.6	5.7
30	5.4	.....	6.1	6.1	5.4	6.8	5.8	5.15	5.05	5.2	5.5	.....
31	5.5	.....	6.0	.....	5.4	.....	5.6	5.15	.....	5.25	.....	.....

a No readings July 1 to 8; gage broken.

Daily gage height, in feet, of Hiwassee River at Murphy, N. C.—Continued.

Day	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1901												
1	6.0	6.05	5.6	6.35	6.15	6.35	6.0	5.3	6.7	5.6	5.25	5.2
2	5.9	5.95	5.6	7.65	6.1	6.2	5.9	5.25	6.4	5.6	5.25	5.2
3	5.8	5.9	5.55	7.6	6.05	6.1	5.65	5.2	6.25	5.6	5.25	5.3
4	5.7	7.55	5.55	7.1	6.0	6.05	5.6	5.2	6.2	5.5	5.3	5.35
5	5.6	6.75	5.7	6.75	6.0	6.0	5.55	5.2	6.15	5.5	5.3	5.2
6	5.6	6.4	5.6	6.75	6.05	5.95	5.7	7.65	6.05	5.5	5.3	5.25
7	5.6	6.25	5.55	6.5	5.95	6.1	6.55	7.0	6.0	5.45	5.25	5.2
8	5.5	6.15	5.55	6.4	5.85	5.9	5.75	6.05	5.9	5.4	5.25	5.25
9	5.5	6.95	5.55	6.25	5.85	5.85	5.55	5.75	5.85	5.45	5.25	5.25
10	5.5	6.5	5.6	6.2	5.85	5.8	5.5	5.6	5.8	5.4	5.25	6.15
11	8.8	6.4	6.5	6.1	5.8	5.8	5.45	5.85	6.0	5.4	5.25	5.55
12	9.2	6.3	6.1	6.1	5.75	5.95	5.45	6.55	5.8	5.4	5.2	5.4
13	7.5	6.25	5.95	6.15	5.75	5.85	5.4	5.75	6.0	6.2	5.4	5.4
14	6.85	6.15	5.85	6.55	5.7	6.5	5.4	7.95	5.8	5.5	5.3	6.3
15	6.5	6.05	5.75	6.35	5.65	6.5	5.45	7.3	5.7	5.45	5.2	9.1
16	6.3	6.0	5.75	6.2	5.65	6.35	5.8	7.9	5.9	5.4	5.2	6.8
17	6.2	5.9	5.7	6.15	5.65	6.3	5.4	8.15	7.2	5.4	5.2	6.7
18	6.1	5.85	5.65	6.1	5.6	6.1	5.4	8.45	6.75	5.4	5.25	6.0
19	5.9	5.85	5.6	6.55	6.7	6.0	7.1	7.35	6.2	5.4	5.25	5.9
20	5.85	5.8	5.6	11.4	7.2	6.05	5.65	7.05	6.0	5.35	5.25	5.8
21	5.85	5.75	5.95	7.9	7.5	5.85	5.45	8.15	5.9	5.35	5.2	5.7
22	5.9	5.75	5.75	7.25	10.6	5.8	5.65	8.0	5.8	5.35	5.2	5.75
23	5.8	5.75	5.65	6.95	7.75	5.75	5.4	12.7	5.75	5.35	5.25	5.7
24	6.05	5.7	5.95	6.7	7.1	5.7	5.35	8.25	5.7	5.3	5.45	5.9
25	5.9	5.65	5.8	6.65	6.85	5.7	5.45	7.35	5.65	5.3	5.3	5.85
26	5.85	5.7	10.8	6.5	6.55	6.1	5.3	6.95	5.65	5.3	5.2	5.85
27	5.9	5.65	8.2	6.4	6.5	5.7	5.65	6.75	5.6	5.3	5.2	7.5
28	6.05	5.6	7.2	6.35	6.35	6.2	5.3	6.85	5.6	5.3	5.15	6.55
29	5.95	.....	6.8	6.2	6.35	6.05	5.5	7.0	5.75	5.3	5.15	13.3
30	6.0	.....	6.6	6.15	6.2	5.75	5.35	6.8	5.6	5.3	5.2	9.1
31	6.2	.....	6.5	.....	6.75	.....	5.5	6.7	.....	5.25	.....	7.5
1902												
1	6.95	7.8	8.5	6.6	5.7	5.3	5.2	4.9	4.75	5.25	4.9	5.65
2	6.6	9.1	7.5	6.5	5.8	5.3	5.2	4.9	4.8	5.15	4.9	5.5
3	6.15	7.5	7.05	6.35	5.7	5.3	5.15	5.2	4.8	5.05	4.9	6.65
4	6.3	6.9	6.8	6.3	5.65	5.25	5.15	4.95	5.15	5.0	4.9	5.95
5	6.15	6.5	7.15	6.25	5.7	5.25	5.15	4.9	4.95	5.0	4.9	5.5
6	6.1	6.35	6.8	6.15	5.7	5.2	5.15	4.85	4.85	5.1	5.9	5.65
7	6.0	6.25	6.55	6.15	5.6	5.2	5.3	4.85	4.8	5.0	5.2	5.5
8	5.95	6.15	6.45	6.65	5.6	5.55	5.15	4.85	4.8	5.0	5.1	5.45
9	5.9	6.5	6.75	6.35	5.6	5.55	5.1	4.8	4.8	5.0	5.0	5.4
10	5.85	6.0	6.55	6.25	5.5	5.55	5.1	4.8	5.35	4.95	5.05	5.35
11	5.85	5.9	6.5	6.15	5.5	5.5	5.1	4.85	4.95	5.0	5.0	5.35
12	5.8	5.9	6.4	6.1	5.55	5.5	5.5	4.8	4.9	5.45	5.0	5.3
13	5.75	5.85	6.65	6.05	5.55	5.5	5.4	4.8	5.05	5.15	5.0	5.35
14	5.7	5.8	6.45	6.0	5.55	5.45	5.25	4.8	5.05	5.45	5.0	5.25
15	5.7	5.85	6.4	6.0	5.5	5.5	5.3	4.85	4.9	5.15	4.95	5.25
16	5.7	5.9	6.45	6.0	5.55	5.5	5.2	4.8	4.9	5.1	4.95	5.75
17	5.65	5.85	6.9	5.95	5.5	5.45	5.15	4.85	4.85	5.05	5.0	6.15
18	5.65	5.75	6.6	6.0	5.55	5.4	5.1	4.8	4.85	5.0	5.5	5.9
19	5.9	5.75	6.45	5.95	5.5	5.4	5.1	4.8	4.95	4.95	5.15	5.65
20	5.7	5.8	6.35	5.9	5.4	5.4	5.05	4.8	5.35	4.95	5.05	5.5
21	5.65	6.05	6.3	5.85	5.4	5.35	5.05	4.8	5.05	4.95	5.05	5.8
22	5.75	6.25	6.25	5.8	5.35	5.4	5.05	4.75	5.0	4.95	5.0	6.3
23	5.65	6.05	6.2	5.8	5.45	5.3	5.05	4.75	4.95	4.95	5.05	5.9
24	5.65	6.0	6.15	5.75	5.4	5.3	5.0	4.75	4.9	4.95	5.0	5.75
25	5.6	6.05	6.1	5.75	5.5	5.25	5.0	4.75	5.45	4.9	5.5	5.7
26	5.6	6.05	6.05	5.75	5.3	5.5	4.95	4.75	5.15	4.9	6.0	5.6
27	5.65	6.0	6.1	5.75	5.3	5.55	4.9	4.85	5.35	4.95	5.7	5.4
28	5.95	14.15	6.1	5.75	5.25	5.45	4.9	4.95	5.45	4.95	5.5	5.45
29	6.05	.....	10.9	5.7	5.25	5.3	4.9	4.9	5.15	4.9	5.4	5.4
30	6.1	.....	7.5	5.9	5.3	5.25	4.9	4.85	5.05	4.9	5.4	5.75
31	7.2	.....	6.9	.....	5.35	.....	4.9	4.8	.....	4.9	.....	5.5

Daily gage height, in feet, of Hiwassee River at Murphy, N. C.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1	5.05	5.4	8.55	7.1	6.0	6.2	5.4	5.25	4.95	4.85	4.95	4.9
2	5.05	5.4	7.35	6.85	5.95	6.25	5.5	6.5	4.95	4.85	4.9	4.9
3	5.65	5.5	6.95	6.7	5.9	5.9	5.45	5.7	5.0	4.85	4.9	4.9
4	5.85	6.6	6.75	6.95	6.3	5.75	5.4	5.3	5.0	4.9	4.95	4.9
5	5.8	6.9	6.55	6.55	5.85	6.4	5.35	6.15	5.0	4.85	5.4	4.9
6	5.7	6.25	6.6	6.45	5.85	6.75	5.45	5.4	4.95	4.85	5.05	4.9
7	5.6	6.25	6.45	6.4	5.8	6.35	5.65	5.3	4.9	4.85	4.95	4.85
8	5.6	7.6	7.95	6.7	5.8	6.5	5.45	5.2	4.9	5.9	4.95	4.85
9	5.5	6.9	7.75	6.8	5.75	5.9	5.4	5.15	5.05	5.05	4.9	4.85
10	5.5	6.45	7.35	6.55	5.75	5.85	5.65	5.1	4.95	4.9	4.9	4.9
11	5.55	7.2	9.95	6.45	5.7	6.3	5.5	5.2	4.9	4.85	4.9	4.9
12	5.95	7.35	8.2	6.3	5.7	5.9	6.15	5.1	4.9	4.85	5.15	4.9
13	5.7	6.75	7.5	6.5	5.75	5.75	6.1	5.0	4.9	4.85	5.0	4.95
14	5.7	6.45	7.1	7.65	5.7	5.65	6.1	5.0	4.9	4.85	4.95	5.05
15	5.6	6.25	6.85	7.25	5.7	5.65	5.7	5.1	5.15	4.85	5.0	4.95
16	5.55	6.2	6.7	6.9	5.65	5.6	5.55	5.15	5.45	4.85	4.95	4.9
17	5.6	9.15	6.55	6.7	5.6	5.55	5.75	5.2	5.1	4.95	5.0	4.85
18	5.9	7.3	6.45	6.55	5.6	5.5	5.5	5.2	5.05	5.05	5.45	4.85
19	5.4	6.75	6.35	6.45	5.55	5.5	5.45	5.1	4.95	4.9	5.0	4.85
20	5.35	6.5	6.25	6.4	5.55	5.5	5.45	5.2	4.95	4.9	5.0	5.05
21	5.4	6.35	6.9	6.45	6.1	5.65	5.35	5.1	4.95	4.9	5.0	5.25
22	5.35	6.2	7.1	6.25	5.55	5.45	5.35	5.1	4.95	4.85	4.95	5.0
23	5.35	6.05	11.8	6.2	5.5	5.5	5.35	5.05	4.9	4.85	4.95	5.0
24	5.35	6.0	8.75	6.15	5.5	5.45	5.3	5.05	4.9	4.9	4.95	4.95
25	5.4	5.95	7.65	6.1	5.45	5.4	5.25	5.05	4.9	4.85	4.95	4.95
26	5.35	5.85	7.15	6.25	5.45	5.45	5.25	5.0	4.85	4.85	4.95	5.0
27	5.5	5.8	6.9	6.1	5.45	5.75	5.25	5.0	4.9	4.85	4.95	4.95
28	5.35	12.0	6.75	6.05	5.45	5.85	5.25	5.0	4.9	4.85	4.9	5.05
29	5.55	.....	6.65	6.0	5.95	5.55	5.3	4.95	4.9	4.85	4.9	5.0
30	5.45	.....	7.85	5.95	5.6	5.45	5.35	4.95	4.85	4.9	4.9	4.95
31	5.4	.....	7.55	.....	5.8	.....	5.4	4.95	.....	4.95	.....	4.95
1904												
1	4.9	5.15	5.5	5.75	5.45	5.5	5.25	5.5	5.2	4.8	4.75	5.15
2	4.9	5.1	5.5	5.7	5.4	5.35	5.1	5.2	5.1	4.8	4.75	5.0
3	5.05	5.25	5.55	5.6	5.45	5.3	5.1	5.05	5.05	4.8	4.8	5.55
4	4.95	5.1	5.55	5.55	5.45	5.25	5.05	5.05	5.3	4.8	5.0	5.15
5	4.9	5.1	5.45	5.55	5.5	5.2	5.45	5.05	5.55	4.8	4.95	5.15
6	4.85	5.1	5.4	5.5	5.45	5.15	5.1	5.65	5.15	4.8	4.9	5.95
7	5.0	5.15	7.8	5.95	5.4	6.85	5.1	5.15	5.1	4.8	4.8	5.4
8	4.85	6.0	6.6	6.5	5.55	5.65	5.05	5.85	5.05	4.8	4.8	5.15
9	4.9	5.5	6.15	5.95	5.55	5.35	6.15	5.45	5.0	4.75	4.8	5.1
10	4.9	5.45	5.9	6.05	6.05	5.25	5.25	5.25	5.0	4.75	4.8	5.15
11	4.95	5.4	6.0	5.95	5.8	5.25	5.1	5.65	5.0	4.75	4.8	5.15
12	5.05	5.35	5.75	5.8	5.7	5.35	5.1	5.45	4.95	4.75	4.8	5.0
13	5.05	5.25	5.7	5.7	5.6	5.2	5.25	5.5	4.95	4.75	5.0	5.05
14	5.1	5.2	6.25	5.65	5.55	5.15	5.1	5.25	4.95	4.75	5.0	5.05
15	5.0	5.6	6.0	5.6	5.55	5.15	5.0	7.25	4.95	4.75	5.0	5.0
16	5.0	5.4	5.75	5.65	5.45	5.1	5.0	5.45	4.9	4.75	4.9	5.0
17	5.7	5.3	5.7	5.55	5.45	5.1	5.35	5.25	4.9	4.75	4.8	5.05
18	5.35	5.25	5.65	5.55	5.45	5.1	5.35	5.15	4.9	4.75	4.8	5.05
19	5.2	5.25	5.6	5.5	5.4	5.1	5.0	5.1	4.85	4.75	4.85	5.05
20	5.15	6.05	5.5	5.45	5.35	5.65	4.95	5.45	4.85	4.75	4.85	5.0
21	5.1	5.7	5.5	5.6	5.35	5.3	4.95	5.2	4.95	4.75	4.8	4.95
22	5.2	6.55	6.5	5.45	5.3	5.2	5.2	5.1	4.9	4.75	4.9	4.95
23	6.3	6.4	7.4	5.4	5.3	5.15	5.05	5.1	4.9	4.7	4.9	4.95
24	5.7	6.0	7.35	5.4	5.3	5.1	5.05	5.5	4.85	4.75	4.95	5.0
25	5.45	5.75	6.5	5.4	5.25	5.05	5.15	5.35	4.85	4.75	4.85	5.25
26	5.35	5.6	6.35	5.4	5.25	5.25	5.0	5.1	4.85	4.75	4.85	5.15
27	5.25	5.6	6.35	5.75	5.25	5.6	4.95	5.6	4.85	4.75	4.85	5.1
28	5.2	5.5	6.1	5.6	5.2	5.1	4.95	5.3	4.85	4.8	4.8	6.45
29	5.2	5.45	6.0	5.55	5.2	5.85	5.05	5.15	4.85	4.8	4.8	5.65
30	5.05	.....	5.9	5.5	5.2	5.3	5.2	5.1	4.85	4.8	5.25	5.4
31	5.20	.....	5.8	.....	6.1	.....	4.95	5.1	.....	4.75	.....	5.3

Daily gage height, in feet, of Hiwassee River at Murphy, N. C.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	5.25	5.3	5.8	5.55	6.3	5.7	5.85	5.2	5.15	5.0	5.0	5.2
2	5.2	5.25	5.8	5.55	6.05	5.65	6.0	5.2	5.25	4.95	5.0	5.15
3	5.45	5.2	5.7	5.5	5.9	5.55	5.45	5.15	5.3	5.0	5.0	10.0
4	5.4	5.2	5.6	5.5	5.9	5.55	5.35	5.15	5.2	5.5	5.0	6.5
5	5.35	5.2	5.6	5.65	5.8	5.5	5.65	5.2	5.15	5.1	5.0	5.9
6	5.35	5.95	5.6	5.65	6.1	5.5	5.4	5.15	5.1	5.0	5.0	5.65
7	5.8	5.75	5.6	5.7	6.2	5.5	5.45	5.15	5.1	5.0	5.1	5.55
8	5.5	5.7	5.6	5.6	6.7	5.45	5.35	5.35	5.1	5.0	5.0	5.55
9	5.45	8.75	5.6	5.7	6.05	5.4	5.35	5.35	5.1	4.95	5.0	8.7
10	5.4	6.95	6.1	5.65	5.9	5.4	6.35	5.25	5.05	5.0	5.0	7.0
11	5.4	6.3	6.0	5.6	5.8	5.35	6.55	6.3	5.15	7.55	5.0	6.35
12	5.5	6.1	5.8	5.85	5.75	5.4	10.3	5.8	5.15	5.45	5.0	6.05
13	6.6	7.0	5.8	5.85	5.9	5.35	6.85	5.75	5.1	5.2	5.0	5.85
14	6.55	6.3	5.7	5.75	5.7	5.4	6.15	6.3	5.1	5.1	5.0	5.75
15	6.6	6.3	5.6	5.7	5.65	5.3	5.85	5.9	5.05	5.1	5.0	5.85
16	5.8	6.0	5.6	5.8	7.2	5.4	5.8	5.75	5.05	5.2	5.0	5.8
17	5.65	5.9	5.6	5.7	6.45	5.5	5.65	5.6	5.05	5.1	5.0	5.7
18	5.6	5.8	5.6	5.65	6.1	5.4	5.55	5.5	5.0	5.05	5.0	5.65
19	5.5	5.7	5.55	5.6	5.95	5.6	5.6	5.45	5.0	5.05	5.0	5.6
20	5.6	6.2	5.65	5.55	5.85	5.5	5.5	5.4	5.0	5.05	5.35	5.65
21	5.45	8.2	7.0	5.55	5.8	5.5	5.4	5.35	5.0	5.05	5.15	6.6
22	5.4	7.2	6.25	5.65	5.85	5.8	5.5	5.3	5.0	5.0	5.1	6.2
23	5.35	6.6	6.05	5.5	6.45	6.75	5.4	5.25	5.0	5.0	5.05	6.15
24	5.35	6.4	5.9	5.5	6.95	5.55	5.35	6.5	4.95	5.0	5.0	6.4
25	5.3	6.2	5.85	5.45	6.35	5.55	5.4	5.5	4.95	5.0	5.15	6.1
26	5.25	6.1	5.75	5.5	6.2	5.35	5.3	5.6	4.95	5.3	5.2	5.95
27	5.25	6.0	5.7	5.9	6.1	5.35	5.3	5.35	4.95	5.15	5.1	5.8
28	5.2	5.9	5.65	5.8	5.95	5.45	5.35	5.3	4.95	5.1	5.1	5.75
29	5.15	.....	5.65	5.7	5.85	5.4	5.45	5.25	4.95	5.05	5.1	5.9
30	5.3	.....	5.65	6.95	5.8	5.55	5.3	5.2	4.95	5.05	5.2	5.7
31	5.2	.....	5.6	.....	5.95	.....	5.25	5.2	.....	5.0	.....	5.65

Rating tables for Hiwassee River at Murphy, N. C.

OCTOBER 20, 1897, TO DECEMBER 31, 1898, AND JANUARY 1 TO DECEMBER 31, 1901.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
4.70	220	4.90	300	5.00	340	5.10	390
4.80	260						

JANUARY 1 TO DECEMBER 31, 1899.[b]

4.70	252	5.70	884	7.40	3,660	13.00	13,180
4.80	280	5.80	1,016	7.60	4,000	14.00	14,880
4.90	310	5.90	1,148	7.80	4,340	15.00	16,580
5.00	340	6.00	1,280	8.00	4,690	16.00	18,280
5.10	396	6.20	1,620	8.50	5,530	17.00	19,980
5.20	452	6.40	1,960	9.00	6,380	18.00	21,680
5.30	508	6.60	2,300	9.50	7,230	19.00	23,380
5.40	564	6.80	2,640	10.00	8,080		
5.50	620	7.00	2,980	11.00	9,780		
5.60	752	7.20	2,320	12.00	11,480		

a Above gage height 5.10 feet use the 1902 rating table.

b Above gage height 6.0 feet the rating curve is a tangent, the difference being 170 per tenth.

Rating tables for Hiwassee River at Murphy, N. C.—Continued.

JANUARY 1 TO DECEMBER 31, 1900.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
4.80	310	5.60	861	6.40	2,025	7.40	3,775
4.90	362	5.70	977	6.50	2,200	7.60	4,125
5.00	415	5.80	1,093	6.60	2,375	7.80	4,475
5.10	481	5.90	1,209	6.70	2,550	8.00	4,825
5.20	547	6.00	1,325	6.80	2,725	8.50	5,700
5.30	613	6.10	1,500	6.90	2,900		
5.40	679	6.20	1,675	7.00	3,075		
5.50	745	6.30	1,850	7.20	3,425		

JANUARY 1, 1902, TO DECEMBER 31, 1903.[b]

4.80	205	5.90	1,070	7.00	3,000	8.50	5,700
4.90	265	6.00	1,200	7.10	3,180	9.00	6,600
5.00	325	6.10	1,330	7.20	3,360	9.50	7,500
5.10	385	6.20	1,560	7.30	3,540	10.00	8,400
5.20	450	6.30	1,740	7.40	3,720	11.00	10,200
5.30	520	6.40	1,920	7.50	3,900	12.00	12,000
5.40	590	6.50	2,100	7.60	4,080	13.00	13,800
5.50	670	6.60	2,280	7.70	4,260	14.00	15,600
5.60	750	6.70	2,460	7.80	4,440		
5.70	845	6.80	2,640	7.90	4,620		
5.80	940	6.90	2,820	8.00	4,800		

JANUARY 1, 1904, TO DECEMBER 31, 1905.[c]

4.70	150	5.60	710	6.50	1,850	7.40	3,540
4.80	190	5.70	800	6.60	2,020	7.50	3,750
4.90	235	5.80	900	6.70	2,190	7.60	3,960
5.00	285	5.90	1,010	6.80	2,370	7.80	4,400
5.10	340	6.00	1,130	6.90	2,550	8.00	4,840
5.20	400	6.10	1,260	7.00	2,740	9.00	7,040
5.30	470	6.20	1,400	7.10	2,930	10.00	9,240
5.40	540	6.30	1,540	7.20	3,130		
5.50	620	6.40	1,690	7.30	3,330		

a Above gage height 8.5 feet use the rating table for 1901-1903.
b Above gage height 6.0 feet the rating curve is a tangent, the difference being 180 per tenth.
c This table is based on 62 discharge measurements made during 1900-1905. It is well defined between gage heights 4.8 feet and 6.8 feet. The table has been extended beyond these limits. Above 7.6 feet the rating curve is a tangent, the difference being 220 per tenth.

Estimated monthly discharge of Hiwassee River at Murphy, N. C.

[Drainage area, 410 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1897 *a*					
October 20-31	340	200	243	0.593	0.265
November	590	300	344	.839	.936
December	3,630	340	829	2.02	2.33
1898 *a*					
January	4,350	390	1,049	2.56	2.95
February	768	464	557	1.36	1.42
March	10,400	450	1,171	2.86	3.30
April	6,150	795	1,542	3.76	4.20
May	940	390	630	1.54	1.78
June	670	320	397	.968	1.08
July	1,560	300	667	1.63	1.88
August	8,400	750	2,306	5.62	6.48
September	15,500	590	2,659	6.49	7.24
October	16,300	670	2,677	6.53	7.53
November	2,460	360	1,240	3.02	3.37
December	1,390	340	1,031	2.51	2.89
The year	16,300	300	1,327	3.24	44.12

a Revised estimates.

HURRICANE FALLS, TALLULAH FALLS, GEORGIA

Estimated monthly discharge of Hiwassee River at Murphy, N. C.—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1899					
January	1,790	620	878	2.14	2.47
February	14,880	720	3,088	7.53	7.84
March	22,360	1,450	3,715	9.06	10.45
April	3,320	1,120	1,744	4.25	4.74
May	1,450	460	719	1.75	2.02
June	970	295	440	1.07	1.19
July 8-28	2,640	340	556	1.36	1.06
August	840	340	404	.99	1.14
September	620	310	373	.91	1.01
October	840	265	339	.83	.96
November	905	295	356	.87	.97
December	6,550	340	800	1.95	2.25
1900 *a*					
January	2,375	535	858	2.09	2.41
February	13,080	475	1,829	4.46	4.64
March	3,960	1,325	2,141	5.22	6.01
April	3,250	1,030	1,717	4.19	4.67
May	1,500	670	877	2.14	2.47
June	3,425	670	1,702	4.15	4.63
July	3,075	670	1,170	2.85	3.29
August	1,165	475	588	1.43	1.65
September	3,075	415	664	1.62	1.81
October	3,250	310	596	1.45	1.67
November	2,550	505	725	1.77	1.98
December	3,425	600	1,043	2.54	2.93
The year	13,080	310	1,159	2.83	38.16
1901					
January	6,660	670	1,599	3.90	4.50
February	3,990	750	1,429	3.49	3.63
March	9,840	710	1,554	3.79	4.37
April	10,920	1,380	2,535	6.18	6.89
May	9,490	750	1,941	4.73	5.45
June	2,100	840	1,265	3.09	3.45
July	3,180	520	829	2.02	2.33
August	13,260	450	3,068	7.48	8.62
September	3,360	750	1,254	3.06	3.42
October	1,560	485	627	1.53	1.76
November	630	420	484	1.18	1.32
December	14,340	450	1,976	4.82	5.55
The year	14,340	420	1,547	3.77	51.29
1902					
January	3,360	750	1,203	2.93	3.38
February	15,870	892	2,259	5.51	5.74
March	10,020	1,290	2,582	6.30	7.26
April	2,370	845	1,331	3.25	3.63
May	940	485	677	1.65	1.90
June	710	450	597	1.43	1.6
July	670	265	363	.89	1.03
August	450	190	232	.57	.66
September	555	190	336	.82	.91
October	485	265	347	.85	.98
November	1,200	265	450	1.10	1.23
December	2,370	520	834	2.03	2.34
The year	15,870	190	984	2.28	30.66

a Low-water estimates for 1900 are probably a few per cent. too high.

Estimated monthly discharge of Hiwassee River at Murphy, N. C.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1903					
January	1,135	355	698	1.70	1.96
February	12,000	590	2,498	6.09	6.34
March	11,640	1,650	3,708	9.04	10.42
April	4,170	1,135	2,143	5.23	5.83
May	1,740	630	890	2.17	2.50
June	2,550	590	1,053	2.57	2.87
July	1,470	485	695	1.70	1.96
August	2,100	295	500	1.22	1.41
September	630	235	304	.74	.83
October	1,070	235	280	.68	.78
November	630	265	320	.78	.87
December	485	235	290	.71	.82
The year	12,000	235	1,115	2.72	36.59
1904					
January	1,540	212	401	.978	1.13
February	1,935	340	671	1.64	1.77
March	4,400	540	1,303	3.17	3.66
April	1,850	540	777	1.90	2.12
May	1,260	400	605	1.48	1.71
June	2,460	312	532	1.30	1.45
July	1,330	260	380	.927	1.07
August	3,230	312	573	1.40	1.61
September	665	212	282	.688	.768
October	190	150	176	.429	.495
November	435	170	224	.546	.609
December	1,770	260	438	1.07	1.23
The year	4,400	150	530	1.29	17.62
1905					
January	2,020	370	695	1.70	1.96
February	6,600	400	1,602	3.91	4.07
March	2,740	665	907	2.21	2.55
April	2,645	580	815	1.99	2.22
May	3,130	755	1,282	3.13	3.61
June	2,280	470	664	1.62	1.81
July	10,500	435	1,102	2.69	3.10
August	1,850	370	647	1.58	1.82
September	470	260	307	.749	.836
October	3,855	260	449	1.10	1.27
November	505	285	316	.771	.860
December	9,550	370	1,518	3.70	4.27
The year	10,500	260	859	2.10	28.38

NOTTELY RIVER AT RANGER, N. C.

This station was established February 16, 1901, by O. P. Hall. It is located at the wooden wagon bridge one-half mile from the railroad station at Ranger, N. C., and one-fourth mile below the Atlanta, Knoxville and Northern Railroad bridge.

The bridge is at a flat bend in the river, the channel curving slightly above and below the station for 600 feet. The right bank is high, rocky, and somewhat wooded and will overflow around the end of the bridge for about 50 feet only. The left bank is low

and will overflow for a distance of 700 feet at a gage height of from 15 to 18 feet. The bed of the stream is of gravel and sand and probably shifts considerably. The current is somewhat broken and irregular, mostly because of the piers. There is a moderate velocity and a depth of from 2 to 5 feet at low stages. Discharge measurements are made from the wagon bridge, a wooden structure of 3 spans supported by 2 wooden piers and 2 stone abutments. The center span is 55 feet long, and the end spans are each 36 feet long. The floor of the bridge is about 20 feet above low water. The initial point for soundings is the inside face of the stone abutment on the right bank.

The gage is a vertical board in two sections, each 8 feet long, fastened to the left side of the first wooden pier from the right bank. The gage is read once each day by A. D. Kilpatrick. Bench marks were established as follows: (1) The heads of large wire nails driven into the top of the downstream end of the wooden cap on the left bent of the wooden pier nearest the right bank of the river; elevation, 20.05 feet. (2) A cut on a maple tree 18 inches in diameter, 25 feet from the upstream side of the bridge on the right bank, 25 feet from the edge of the water; elevation, 15.00 feet.

Discharge measurements of Nottely River at Ranger, N. C.

Date	Gage height	Discharge	Date	Gage height	Discharge
1900	*Feet*	*Sec.-ft.*	1903	*Feet*	*Sec.-ft.*
July 31	2.40	500	August 28	2.88	267
			October 2	2.62	188
1901			December 5	2.68	204
February 16	4.20	649			
April 4	5.40	970	1904		
June 28	4.12	612	March 1	3.40	373
October 31	3.40	364	May 14	3.35	353
			August 30	2.75	222
1902			October 7	2.30	121
April 24	4.20	598	December 16	2.58	184
August 14	2.70	213			
November 21	2.75	213	1905		
			April 17	3.48	421
1903			June 20	3.51	399
March 19	4.74	833	June 21	3.98	538
May 15	3.95	551	October 12	3.22	315
July 30	3.42	372			

Daily gage height, in feet, of Nottely River at Ranger, N. C.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1901												
1	.....	.....	3.6	4.8	4.4	6.0	5.0	3.5	6.0	4.1	3.4	3.4
2	.....	.....	3.6	3.8	4.3	4.8	5.2	3.4	5.2	4.0	3.4	3.4
2	.....	.....	3.6	7.0	4.3	4.6	4.2	3.3	5.0	3.9	3.4	3.4
4	.....	.....	3.6	5.6	4.2	5.0	4.1	3.2	4.8	3.9	3.6	3.4
5	.....	.....	3.8	5.2	4.2	4.6	4.0	3.1	5.0	3.8	3.4	3.4
6	.....	.....	3.7	5.1	4.2	5.4	3.9	9.6	4.8	3.8	3.4	3.4
7	.....	.....	3.6	4.9	4.1	4.8	4.8	9.2	4.6	4.0	3.4	3.4
8	.....	.....	3.6	4.7	4.1	4.4	4.6	4.8	4.5	3.9	3.4	3.4
9	.....	.....	3.8	4.6	4.1	4.2	4.0	4.6	4.8	3.8	3.3	3.4
10	.....	.....	5.2	4.5	4.0	4.1	8.8	4.2	4.2	3.8	3.3	6.0
11	.....	.....	5.6	4.3	3.9	4.0	3.7	4.8	4.8	3.7	3.3	4.5
12	.....	.....	4.2	4.2	3.9	3.9	3.6	4.6	4.4	3.6	3.3	3.7
13	.....	.....	4.1	5.2	3.8	4.8	3.5	4.8	5.0	4.6	3.6	3.4
14	.....	.....	4.0	5.0	3.8	7.0	3.5	14.4	4.6	4.0	3.4	6.0
15	.....	.....	3.9	4.9	3.7	5.6	3.4	9.6	4.4	3.8	3.4	13.0
16	.....	4.2	3.9	4.7	3.6	5.8	4.0	9.2	5.0	3.7	3.4	6.0
17	.....	4.1	3.8	4.5	3.6	5.4	3.9	10.0	11.0	3.7	3.4	5.0
18	.....	4.0	3.8	4.4	3.5	5.6	3.8	10.8	6.2	3.6	3.4	4.5
19	.....	4.0	3.7	7.8	4.2	4.8	9.8	8.0	5.0	3.6	3.4	4.0
20	.....	3.9	3.7	8.8	6.4	5.0	4.2	6.8	4.8	3.5	3.4	3.4
21	.....	3.8	3.6	6.2	11.8	4.6	4.0	10.0	4.6	3.5	3.4	3.4
22	.....	3.8	3.6	5.7	15.0	4.4	3.8	11.0	4.4	3.5	3.4	3.4
23	.....	3.7	4.8	5.5	8.5	4.2	3.6	15.8	4.3	3.4	3.4	4.0
24	.....	3.7	5.4	5.2	5.6	4.1	3.5	8.4	4.2	3.4	4.0	4.5
25	.....	3.7	6.2	5.0	5.4	4.0	3.5	6.2	4.1	3.4	3.4	4.0
26	.....	3.7	13.5	4.8	5.2	5.2	3.4	6.4	4.0	3.3	3.4	4.0
27	.....	3.7	8.2	4.7	5.0	4.1	3.8	6.4	3.9	3.3	3.4	6.5
28	.....	3.7	6.2	4.6	4.9	4.0	3.5	6.2	4.2	3.3	3.4	6.0
29	.....	.....	5.4	4.5	4.8	4.0	3.8	6.0	4.4	3.3	3.4	20.0
30	.....	.....	5.2	4.4	4.7	4.6	3.6	5.8	4.1	3.4	3.4	10.0
31	.....	.....	5.2	.....	5.0	.....	3.7	5.6	.....	3.4	.....	6.0
1902												
1	5.5	7.0	9.0	5.0	4.1	3.4	3.0	2.8	2.6	2.9	2.8	3.3
2	5.0	7.0	7.2	5.0	4.0	3.3	2.9	2.8	2.6	2.9	2.6	3.5
3	5.0	9.1	6.1	5.0	4.0	3.3	2.9	3.0	3.0	2.7	2.6	6.2
4	4.5	7.8	6.0	5.0	4.0	3.2	2.8	2.8	3.3	2.7	2.6	4.3
5	4.8	5.5	6.3	5.1	4.0	3.2	2.8	2.8	2.8	2.7	2.5	4.4
6	4.4	5.0	5.8	5.0	4.0	3.2	2.8	2.8	2.6	2.6	2.5	4.3
7	4.4	4.9	5.4	4.8	4.0	3.1	2.8	2.6	2.6	2.6	4.0	4.3
8	4.4	4.9	5.3	4.2	3.7	3.8	2.8	2.6	2.5	2.5	4.0	3.0
9	4.4	4.5	5.2	5.0	3.7	3.6	2.7	2.6	2.7	2.8	2.8	3.0
10	4.3	4.3	5.1	5.0	3.7	3.3	3.0	2.6	2.9	2.7	2.8	3.8
11	4.2	4.2	5.1	5.0	3.7	3.2	3.0	3.8	2.6	3.0	2.7	3.5
12	4.2	4.1	5.0	4.8	3.6	3.1	3.7	3.6	2.5	2.7	2.7	3.4
13	4.0	4.0	6.2	4.4	3.6	3.1	4.4	2.6	3.4	2.9	2.7	3.4
14	3.8	4.0	5.0	4.4	4.7	3.1	3.6	2.6	3.0	3.3	2.5	3.3
15	3.4	4.0	5.0	4.4	4.6	3.1	4.8	2.6	2.8	3.5	2.5	3.3
16	3.4	4.1	6.2	4.4	3.8	3.0	4.3	2.6	2.8	3.0	2.5	5.4
17	3.2	4.0	5.2	4.6	3.7	3.0	4.0	2.6	2.7	2.9	2.4	4.6
18	3.0	4.0	5.8	4.5	3.7	3.0	3.0	2.6	2.7	2.7	3.7	4.6
19	4.0	4.0	5.6	4.4	3.7	3.0	3.0	2.6	3.3	2.9	3.2	3.8
20	4.0	4.0	5.0	4.2	3.6	3.0	3.0	2.6	3.0	2.8	3.0	3.7
21	4.0	4.1	5.0	4.0	3.6	3.3	2.8	2.4	3.0	2.8	2.9	5.4
22	4.0	5.0	4.9	4.1	3.5	3.1	2.8	2.4	2.8	2.7	2.8	5.2
23	3.8	4.5	4.8	4.1	3.4	3.0	2.8	2.4	2.6	2.7	2.8	4.4
24	3.8	4.4	4.7	4.1	3.3	3.0	2.8	2.5	2.6	2.7	2.7	3.8
25	3.8	4.8	4.6	4.1	3.3	3.0	2.7	2.5	2.9	2.6	5.3	3.6
26	3.8	4.6	4.6	4.0	3.3	3.6	2.7	2.7	2.7	2.5	4.4	3.5
27	4.0	4.8	4.7	4.0	3.3	3.6	2.7	3.0	2.6	2.5	3.7	3.6
28	4.4	21.0	4.7	4.0	3.4	3.0	2.7	2.8	3.1	2.5	3.1	3.4
29	4.5	.....	13.8	4.2	3.4	3.0	2.8	2.8	3.0	2.4	3.0	5.2
30	5.0	.....	6.8	4.3	3.4	3.0	2.8	2.7	3.0	2.4	3.0	5.0
31	6.3	.....	5.2	.....	3.4	.....	2.8	2.7	.....	2.3	.....	3.4

Daily gage height, in feet, of Nottely River at Ranger, N. C.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1	3.2	3.2	3.8	6.4	4.2	6.0	3.8	7.0	2.8	2.6	2.7	2.5
2	3.2	3.5	6.3	6.1	4.4	7.0	3.7	4.4	2.8	2.5	2.7	2.5
3	3.0	3.6	5.8	5.7	4.3	6.0	3.6	3.7	2.7	2.5	2.8	2.5
4	4.0	9.6	5.4	5.8	4.2	6.4	3.9	3.6	2.7	2.5	2.9	2.5
5	3.8	6.0	5.0	5.3	4.2	7.4	3.6	3.5	2.7	2.6	2.9	2.6
6	3.7	4.8	4.9	5.2	4.1	7.0	3.6	3.4	2.9	2.6	2.9	2.6
7	3.7	6.0	5.0	5.1	4.0	7.5	3.7	3.3	2.8	2.6	2.9	2.6
8	3.6	7.8	5.2	5.0	4.0	5.0	3.7	3.2	2.8	4.0	2.9	2.5
9	3.6	5.4	6.7	7.0	4.0	5.0	3.8	3.0	3.2	2.8	2.8	2.5
10	3.8	4.9	6.2	6.5	4.9	4.9	4.0	3.1	2.9	2.7	2.8	2.5
11	3.8	7.6	11.0	5.8	3.9	5.2	3.9	3.4	2.8	2.7	2.7	2.5
12	4.8	7.0	7.6	5.0	3.9	5.2	5.0	3.3	2.8	2.7	3.0	2.5
13	3.8	5.4	6.2	3.6	3.9	5.0	5.8	3.2	2.7	2.6	2.8	2.5
14	3.8	5.0	5.0	3.0	3.9	4.0	5.0	4.0	2.7	2.6	2.7	2.5
15	3.7	4.7	5.4	6.6	3.9	4.0	4.0	4.0	2.7	2.8	2.6	2.5
16	3.6	4.7	5.1	5.8	3.9	4.0	3.9	3.7	2.7	2.8	2.6	2.5
17	3.5	3.0	5.1	5.7	3.8	3.8	4.4	3.3	4.0	2.9	2.8	2.6
18	3.6	5.6	5.0	5.5	3.8	3.8	3.7	3.4	3.2	2.8	4.0	2.6
19	3.5	5.2	4.9	5.4	3.8	3.8	3.6	3.4	2.9	2.7	3.0	2.7
20	3.4	5.0	4.7	5.2	3.8	3.7	4.7	3.3	2.8	2.7	2.8	3.5
21	3.4	4.7	7.0	5.0	4.0	3.7	4.0	3.0	2.9	2.7	2.8	3.4
22	3.3	4.7	8.0	5.2	3.7	3.6	3.5	3.0	2.8	2.7	2.8	3.4
23	3.3	4.6	14.8	4.8	3.5	3.5	3.4	3.2	2.8	2.6	2.7	3.8
24	3.3	4.4	8.0	4.7	3.5	3.5	3.3	3.0	2.7	2.6	2.7	3.7
25	3.4	4.4	6.2	4.6	3.6	3.5	3.0	3.0	2.7	2.6	2.7	3.6
26	3.4	4.3	6.1	4.7	3.6	5.0	3.1	2.9	2.7	2.6	2.6	3.5
27	3.3	4.5	5.6	4.7	3.6	5.0	3.1	2.9	2.7	2.6	2.6	3.4
28	3.4	17.5	5.2	4.6	3.7	4.7	3.1	2.9	2.7	2.5	2.6	3.2
29	3.6	.....	5.0	4.5	3.9	4.0	3.0	2.9	2.6	2.5	2.6	3.1
30	3.7	.....	6.4	4.3	5.5	3.8	3.0	2.9	2.6	2.7	2.5	3.0
31	3.6	.....	7.7	.....	5.7	.....	4.0	2.8	.....	2.7	.....	2.8
1904												
1	2.8	3.0	3.4	3.8	3.3	3.3	2.9	3.4	2.7	2.3	2.2	2.8
2	2.8	2.9	3.4	3.7	3.3	3.3	2.7	3.0	2.6	2.3	2.2	2.4
3	2.8	2.9	3.3	3.6	3.3	3.0	2.5	2.8	2.6	2.3	2.2	2.4
4	2.7	3.4	3.3	3.5	3.3	2.9	2.4	2.8	2.7	2.2	2.4	2.8
5	2.7	3.2	3.3	3.4	3.3	2.9	2.4	3.6	4.1	2.2	2.3	4.1
6	2.6	3.0	3.2	3.3	3.2	2.8	2.9	3.0	3.0	2.2	2.3	3.6
7	2.8	3.0	3.3	4.2	3.2	7.3	2.7	2.8	2.8	2.2	2.3	3.1
8	2.7	4.5	5.1	5.6	3.3	4.7	2.7	5.0	2.7	2.2	2.3	3.0
9	2.7	3.6	4.5	5.0	4.6	3.7	3.0	3.5	2.6	2.2	2.3	2.9
10	2.6	3.2	4.0	4.5	3.9	3.0	2.8	3.1	2.5	2.2	2.3	2.8
11	2.6	3.3	4.0	4.0	3.7	2.9	2.6	4.0	2.6	2.2	2.3	2.8
12	2.6	3.3	3.8	3.8	3.4	3.0	3.1	3.8	2.6	2.2	2.3	2.8
13	2.5	3.1	3.3	3.7	3.4	2.9	2.2	3.4	2.5	2.2	2.4	2.7
14	2.5	3.0	4.4	3.6	3.3	2.7	2.7	2.9	2.5	2.2	2.4	2.6
15	2.7	3.3	4.0	3.6	3.3	2.7	2.6	3.9	2.4	2.2	2.4	3.0
16	2.8	3.1	3.7	3.5	3.1	2.7	2.4	3.1	2.3	2.2	2.4	2.9
17	4.0	3.0	3.7	3.4	3.1	2.7	2.6	2.9	2.3	2.2	2.4	2.8
18	3.2	3.0	3.7	3.5	3.1	2.7	2.6	2.7	2.3	2.2	2.3	2.7
19	3.8	3.0	3.6	3.5	3.1	2.6	2.5	2.7	2.3	2.2	2.3	2.7
20	3.0	4.8	3.4	3.5	3.1	2.7	2.4	2.7	2.3	2.2	2.3	2.7
21	3.0	3.8	3.3	3.4	3.0	2.9	2.4	2.7	2.2	2.2	2.3	2.7
22	3.0	5.6	5.4	3.4	3.0	3.0	4.2	2.7	2.2	2.2	2.3	2.6
23	5.0	5.0	6.7	3.4	3.0	2.8	2.8	2.6	2.2	2.2	2.3	2.5
24	4.0	4.3	6.4	3.3	2.9	2.7	2.6	3.5	3.0	2.2	2.2	2.7
25	3.8	3.8	5.2	3.3	3.0	2.7	3.1	2.9	2.6	2.2	2.2	2.8
26	3.4	3.7	5.1	3.8	2.9	2.7	2.8	2.8	2.3	2.2	2.2	2.8
27	3.2	3.6	5.0	3.7	2.9	2.8	2.6	2.7	2.3	2.2	2.2	2.8
28	3.0	3.5	4.5	3.7	2.9	3.2	2.8	3.2	2.3	2.2	2.2	4.7
29	3.0	3.3	4.1	3.4	2.9	4.6	2.6	2.7	2.3	2.2	2.2	3.4
30	3.0	.....	4.0	3.4	5.4	3.2	2.6	2.7	2.3	2.2	3.0	3.1
31	2.8	.....	3.9	.....	3.8	.....	2.6	2.7	.....	2.2	.....	3.0

Daily gage height, in feet, of Nottely River at Ranger, N. C.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	3.0	2.9	3.7	3.3	3.9	3.5	3.9	2.7	3.4	2.3	2.6	2.6
2	2.9	2.9	3.6	3.3	3.8	3.3	4.1	2.7	3.1	2.3	2.6	2.7
3	3.5	2.9	3.6	3.3	3.7	3.5	3.6	2.7	3.0	2.8	2.7	11.8
4	3.1	3.0	3.6	3.2	3.6	3.4	3.4	2.7	3.0	3.0	2.7	4.8
5	3.1	2.9	3.6	3.4	3.5	3.3	3.1	2.7	2.9	3.0	2.7	3.2
6	3.1	4.0	3.5	3.5	5.8	3.2	4.2	2.6	2.9	3.0	2.6	2.9
7	3.0	3.9	3.5	3.6	5.6	3.2	4.1	2.8	2.8	2.9	2.6	2.7
8	3.5	5.4	3.5	3.5	5.2	3.2	3.9	2.7	2.8	2.5	2.6	9.9
9	3.1	10.2	3.4	3.5	4.9	3.1	3.1	3.1	2.6	2.5	2.6	7.2
10	3.0	5.2	4.7	3.4	4.2	3.0	3.0	3.9	2.4	2.4	2.6	5.8
11	2.9	4.3	4.1	3.4	4.0	3.0	4.5	3.9	2.4	6.6	2.6	4.2
12	11.4	4.2	3.8	3.8	3.8	3.0	9.0	4.0	2.6	3.8	2.6	4.0
13	7.2	5.9	3.9	3.7	3.7	3.0	5.0	4.2	2.5	3.2	2.5	4.0
14	5.3	4.6	3.8	3.6	3.5	3.0	4.1	3.9	2.5	2.8	2.5	3.9
15	5.1	4.2	3.5	3.5	3.5	3.1	3.9	3.4	2.4	2.5	2.5	3.9
16	4.5	4.0	3.5	3.9	6.6	3.1	3.3	3.3	2.4	2.5	2.4	3.4
17	4.5	3.8	3.5	3.5	4.9	3.2	3.5	3.3	2.4	2.5	2.4	3.5
18	3.4	3.6	3.4	3.4	4.2	3.0	3.3	3.2	2.4	2.6	2.3	3.5
19	3.3	3.7	3.4	3.4	3.9	3.3	3.2	3.0	2.4	2.6	2.3	3.4
20	3.3	4.0	3.5	3.4	3.8	3.4	3.4	3.0	2.3	2.6	2.3	4.6
21	3.3	7.8	7.5	3.4	3.6	4.0	3.3	2.9	2.3	2.6	2.3	5.9
22	3.2	5.2	4.8	3.5	3.4	3.9	3.2	2.8	2.3	2.6	2.4	5.1
23	3.2	5.0	4.4	3.4	5.3	5.0	3.0	2.8	2.3	2.5	2.4	5.0
24	3.1	4.7	4.2	3.3	5.0	3.6	3.0	2.8	2.4	2.5	2.4	5.4
25	3.0	4.6	3.7	3.3	4.7	3.4	2.9	2.7	2.4	2.5	2.3	5.2
26	3.0	4.4	3.6	3.4	4.3	3.4	2.8	2.6	2.4	3.2	2.4	4.9
27	3.0	3.9	3.6	4.4	4.0	3.3	2.7	2.6	2.3	2.8	2.5	4.7
28	2.9	3.8	3.5	3.8	3.9	3.3	2.8	2.7	2.3	2.7	2.5	4.6
29	3.4	.....	3.4	3.8	3.8	3.4	3.0	2.7	2.3	2.7	2.7	4.2
30	3.1	.....	3.4	4.6	3.6	3.2	3.0	2.6	2.3	2.6	2.7	4.0
31	2.9	.....	3.4	.....	4.0	.....	2.8	2.6	.....	2.6	.....	3.5

Rating tables for Nottely River at Ranger, N. C.

FEBRUARY 16, 1901, TO DECEMBER 31, 1903.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec-ft.*	*Feet*	*Sec-ft.*	*Feet*	*Sec-ft.*	*Feet*	*Sec-ft.*
2.30	148	4.10	590	5.90	1,130	9.40	2,180
2.40	155	4.20	620	6.00	1,160	9.60	2,240
2.50	172	4.30	650	6.20	1,220	9.80	2,300
2.60	190	4.40	680	6.40	1,280	10.00	2,360
2.70	209	4.50	710	6.60	1,340	11.00	2,660
2.80	229	4.60	740	6.80	1,400	12.00	2,960
2.90	250	4.70	770	7.00	1,460	13.00	3,260
3.00	272	4.80	800	7.20	1,520	14.00	3,560
b 3.10	296	4.90	830	7.40	1,580	15.00	3,860
b 3.20	322	5.00	860	7.60	1,640	16.00	4,160
3.30	350	5.10	890	7.80	1,700	17.00	4,460
3.40	380	5.20	920	8.00	1,760	18.00	4,760
3.50	410	5.30	950	8.20	1,820	19.00	5,060
3.60	440	5.40	980	8.40	1 880	20.00	5,360
3.70	470	5.50	1,010	8.60	1,940	21.00	5,660
3.80	500	5.60	1,040	8.80	2,000		
3.90	530	5.70	1,070	9.00	2,060		
4.00	560	5.80	1,100	9.20	2,120		

a Above gage height 3.3 feet the rating curve is a tangent, the difference being 30 per tenth.
b For 1901, 3.10=290 and 3.20=320.

Rating tables for Nottely River at Ranger, N. C.—Continued.

JANUARY 1, 1904, TO DECEMBER 31, 1905.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.20	101	3.20	320	4.20	624	5.40	1,008
2.30	120	3.30	346	4.30	656	5.60	1,072
2.40	141	3.40	373	4.40	688	5.80	1,136
2.50	162	3.50	402	4.50	720	6.00	1,200
2.60	184	3.60	432	4.60	752	7.00	1,520
2.70	206	3.70	464	4.70	784	8.00	1,840
2.80	228	3.80	496	4.80	816	9.00	2,160
2.90	250	3.90	528	4.90	848	10.00	2,480
3.00	272	4.00	560	5.00	880	11.00	2,800
3.10	296	4.10	592	5.20	944	12.00	3,120

a This table is based on 22 discharge measurements made during 1901 to 1905, inclusive. It is well defined between gage heights 2.25 feet and 3.50 feet. Above gage height 3.60 feet the rating curve is a tangent, the difference being 32 per tenth.

Estimated monthly discharge of Nottely River at Ranger, N. C.

[Drainage area, 272 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1901					
February 16-28	.....	.....	514	1.89	0.91
March	3,410	440	774	2.85	3.29
April	2,000	620	956	3.51	3.92
May	3,860	410	894	3.29	3.79
June	1,460	530	790	2.90	3.24
July	2,300	380	639	2.35	2.71
August	4,100	290	1,486	5.46	6.29
September	2,660	530	823	3.03	3.38
October	590	350	463	1.70	1.96
November	560	350	386	1.42	1.58
December	5,360	380	927	3.41	3.93
1902					
January	1,250	272	631	2.32	2.67
February	5,660	560	1,006	3.70	3.85
March	3,500	740	1,095	4.03	4.64
April	890	560	711	2.61	2.91
May	770	350	475	1.75	2.02
June	500	272	322	1.18	1.32
July	800	209	307	1.13	1.30
August	500	155	219	.81	.93
September	380	172	237	.87	.97
October	410	148	221	.81	.93
November	950	148	295	1.08	1.20
December	1,220	272	576	2.12	2.44
The year	5,660	148	508	1.87	25.18
1903					
January	800	272	433	1.59	1.83
February	4,610	322	1,095	4.03	4.20
March	3,800	770	1,289	4.74	5.46
April	1,940	650	1,028	3.78	4.22
May	1,070	410	572	2.10	2.42
June	1,610	410	810	2.98	3.32
July	1,100	272	503	1.85	2.13
August	1,460	229	389	1.43	1.65
September	560	190	238	.88	.98
October	560	172	212	.78	.90
November	560	172	232	.85	.95
December	500	172	254	.93	1.07
The year	4,610	172	588	2.16	29.13

Estimated monthly discharge of Notteley River at Ranger, N. C.—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1904					
January	880	162	298	1.08	1.24
February	1,072	250	423	1.56	1.68
March	1,936	320	656	2.41	2.78
April	1,072	346	472	1.74	1.94
May	1,008	250	382	1.33	1.53
June	1,616	184	334	1.23	1.37
July	624	101	210	.772	.860
August	880	184	310	1.14	1.31
September	592	101	174	.640	.714
October	120	101	108	.379	.437
November	272	101	124	.456	.509
December	784	141	264	.971	1.12
The year	1,936	101	310	1.14	15.52
1905					
January	2,992	250	501	1.84	2.12
February	2,544	250	716	2.63	2.74
March	1,680	373	506	1.86	2.14
April	752	320	420	1.54	1.72
May	1,392	373	640	2.35	2.71
June	880	272	364	1.34	1.50
July	2,160	206	455	1.67	1.92
August	624	184	288	1.06	1.22
September	373	120	174	.640	.714
October	1,392	120	247	.908	1.05
November	206	120	165	.607	.677
December	3,056	184	780	2.87	3.31
The year	3,056	120	438	1.61	21.82

TOCCOA RIVER NEAR BLUERIDGE.

This stream, called Toccoa River in Georgia and Ocoee River in Tennessee, has its source on the northern slopes of the Blue Ridge Mountains in Georgia and flows northwest into Hiwassee River. The area is covered with a fine growth of oak, hickory, and other hard woods. The station, established by B. M. Hall on November 25, 1898, is located at the Morganton Bridge, about 4 miles east of the town of Blueridge, Ga. The gage is a 14-foot rod, in two 7-foot sections, nailed to a tree on the right bank just below the bridge. It is graduated to feet and tenths and is set to conform to bench marks which were established October 15, 1896, and October 26, 1898. The measurements during 1896 were made at the railroad bridge about 3 miles below, but are referred to the present gage by comparison of the bench marks at the two bridges. The bench mark at the Morganton Bridge is on the top of the bridge floor, on the downstream side, 50 feet from the initial point,

and is 18.0 feet above the zero of the gage. The bridge was a wooden, queen-post, open bridge, in three spans, with a total length between abutments of 153 feet, but it has been remodeled and changed into a closed bridge, not suitable for use in making discharge measurements at such an irregular section. Measurements are now made at McCays, Tenn., where a gage has been established.

The observer was W. E. Rogers, a farmer living about a quarter of a mile east of the gage. The station was discontinued March 31, 1903.

Discharge measurements of Toccoa River near Blueridge.

Date	Gage height	Discharge	Date	Gage height	Discharge
1898	*Feet*	*Sec.-ft.*	1900	*Feet*	*Sec.-ft.*
August 26	2.95	624	November 28	2.95	626
November 25	3.15	797	December 17	2.65	419
1899			1901		
April 28	3.50	1,141	January 23	3.05	714
June 16	2.70	522	April 5	3.50	1,061
September 18	1.93	242	June 26	3.44	993
October 24	1.90	222	August 23	6.90	4,697
			October 31	2.62	592
1900			1902		
March 23	3.36	967	April 25	3.20	749
May 18	2.90	679	November 21	2.15	258
July 19	2.90	680			

Daily gage height, in feet, of Toccoa River near Blueridge.

Day	Nov.	Dec.	Day	Nov.	Dec.	Day	Nov.	Dec.	Day	Nov.	Dec.
1898			1898			1898			1898		
1		3.1	9		3.1	17		2.8	25	3.1	2.95
2		3.0	10		3.0	18		2.8	26	3.2	2.8
3		3.0	11		2.9	19		2.8	27	3.3	2.8
4		3.2	12		2.8	20		3.1	28	3.4	2.9
5		3.4	13		2.8	21		3.0	29	3.4	2.9
6		3.4	14		2.8	22		2.3	30	3.4	2.8
7		3.1	15		2.8	23		3.4	31		3.2
8		3.0	16		2.8	24		3.1			

Daily gage height, in feet, of Toccoa River near Blueridge.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1899												
1	3.1	3.2	4.3	4.2	3.7	3.0	2.5	2.6	2.8	2.0	2.1	2.4
2	3.0	3.2	4.0	3.6	3.5	2.1	2.45	2.6	2.4	2.0	2.0	2.2
3	2.9	3.3	4.1	3.11	3.5	2.1	2.4	2.5	2.4	1.9	2.0	2.1
4	2.9	5.9	4.1	4.6	3.4	2.2	2.4	2.5	2.5	1.9	2.0	2.1
5	2.1	6.7	4.0	4.4	3.1	3.0	2.5	2.5	2.4	1.9	2.0	2.1
6	3.02	8.9	4.0	3.9	3.6	2.9	2.8	2.5	2.4	2.0	2.0	2.0
7	3.04	6.1	3.8	4.5	3.4	2.9	2.7	2.5	2.3	3.0	2.0	2.0
8	3.08	5.5	3.7	4.8	3.2	2.9	2.8	2.4	2.3	2.8	2.1	2.0
9	3.1	5.0	3.6	4.0	3.2	2.7	2.75	2.3	2.3	2.6	2.1	2.0
10	3.1	4.0	3.1	4.0	3.1	2.7	2.75	2.3	2.5	2.3	2.1	2.5
11	3.2	3.7	3.0	3.1	3.0	2.7	2.7	2.3	2.6	2.1	2.1	3.6
12	3.0	3.8	3.5	3.9	3.0	3.4	2.7	2.6	2.5	2.0	2.1	3.5
13	3.0	3.9	4.0	3.8	3.0	3.2	2.8	3.4	2.3	2.0	2.0	3.3
14	3.1	4.0	4.0	3.7	3.0	3.0	2.7	3.4	2.3	2.0	2.0	2.9
15	3.1	4.0	4.9	3.7	3.0	2.1	2.6	3.4	2.2	2.0	2.1	2.8
16	3.1	4.1	6.0	3.6	3.0	2.7	2.4	3.2	2.2	2.0	2.1	2.5
17	3.2	3.1	4.4	3.6	3.0	2.6	2.4	2.4	2.1	2.0	2.0	2.4
18	3.1	3.3	4.0	3.6	3.0	2.6	2.8	2.4	2.3	2.0	2.0	2.3
19	3.0	3.4	4.5	3.6	3.3	2.6	2.7	2.4	2.3	2.0	2.0	2.6
20	3.0	3.6	5.0	3.6	3.0	2.6	2.7	2.2	2.0	2.0	2.0	2.6
21	2.1	3.5	4.8	3.6	3.2	2.5	2.8	2.2	2.0	2.0	2.0	2.5
22	3.0	3.6	4.6	3.6	3.2	2.45	2.8	2.2	2.0	2.0	2.0	2.4
23	3.8	3.5	5.6	3.8	3.1	2.6	2.6	2.3	2.0	2.0	2.0	2.5
24	3.1	3.4	5.0	4.0	3.1	2.1	2.5	2.2	2.0	2.0	2.0	.....
25	3.2	3.4	4.5	5.3	3.1	2.4	2.8	2.3	2.0	2.0	2.0	.....
26	3.1	4.0	4.2	4.1	3.1	2.7	2.8	2.2	2.0	2.0	2.3	.....
27	2.1	5.8	4.0	4.6	3.1	2.9	3.9	2.4	2.0	2.0	2.6	.....
28	2.1	4.9	4.0	3.1	3.0	2.85	3.6	2.6	2.0	2.0	2.3	.....
29	2.09	.....	4.0	3.0	3.0	2.7	2.8	2.5	2.0	2.2	3.2	.....
30	2.8	.....	4.0	3.3	3.1	2.6	2.8	2.6	2.0	2.4	3.1	.....
31	4.0	.....	4.8	.....	3.11	.....	2.8	2.7	.....	2.2	.....	.....
1900												
1	.....	.....	.....	3.1	3.6	.....	4.3	3.6	2.6	2.5	3.4	2.6
2	.....	.....	.....	3.1	3.5	.....	4.3	3.5	2.6	2.5	3.4	3.0
3	.....	.....	.....	3.1	3.5	.....	4.2	3.4	2.6	2.5	3.4	3.6
4	.....	.....	.....	3.0	3.4	.....	4.2	3.4	2.6	2.6	3.4	3.6
5	.....	.....	.....	3.0	3.5	.....	4.1	3.4	2.6	2.6	3.4	3.5
6	.....	.....	.....	3.0	3.5	.....	3.6	3.4	2.6	2.6	3.3	3.5
7	.....	.....	.....	3.0	3.4	.....	3.6	3.4	2.6	2.6	3.3	3.4
8	.....	.....	.....	3.0	3.4	.....	3.5	3.4	2.6	2.6	3.3	3.4
9	.....	.....	.....	3.0	3.4	.....	3.5	3.3	2.6	2.6	3.2	3.3
10	.....	.....	.....	3.0	3.3	.....	3.5	3.3	2.6	2.8	3.2	3.3
11	.....	.....	.....	3.4	3.1	.....	3.4	3.3	2.6	2.8	3.1	3.2
12	.....	.....	.....	3.2	3.0	.....	3.4	3.2	2.6	2.9	3.1	3.2
13	.....	.....	.....	3.0	3.0	.....	3.4	3.2	3.0	2.9	3.1	3.0
14	.....	.....	.....	3.0	3.0	.....	3.3	3.2	3.4	2.8	3.1	3.0
15	.....	.....	.....	3.0	3.0	.....	3.3	3.1	4.0	2.8	3.1	2.8
16	.....	.....	.....	3.0	2.8	.....	3.3	2.8	3.6	2.6	3.0	2.8
17	.....	.....	.....	3.3	2.8	.....	3.3	2.8	3.4	2.6	3.0	2.8
18	.....	.....	.....	3.5	2.6	.....	3.2	2.8	3.4	2.6	3.0	2.8
19	.....	.....	.....	3.5	3.6	.....	3.2	2.8	3.2	2.6	3.0	3.8
20	.....	.....	.....	3.4	.....	.....	3.2	2.8	3.2	2.6	3.0	2.7
21	.....	.....	.....	3.3	.....	.....	3.1	2.8	3.0	2.6	3.0	2.7
22	.....	.....	.....	3.3	.....	.....	3.1	3.0	3.0	2.9	2.8	2.6
23	.....	.....	3.4	3.3	.....	.....	3.6	3.0	2.8	8.6	2.7	2.6
24	.....	.....	3.5	3.2	.....	.....	3.5	3.0	2.8	6.0	2.7	2.6
25	.....	.....	3.6	3.5	.....	.....	3.5	2.8	2.6	5.4	2.7	2.6
26	.....	.....	3.5	3.5	.....	.....	3.5	2.8	2.5	4.0	2.7	2.6
27	.....	.....	3.5	3.6	.....	5.0	4.0	2.8	2.5	3.6	2.6	3.0
28	.....	.....	3.4	3.5	.....	5.0	4.0	2.7	2.5	3.6	2.6	3.0
29	.....	.....	3.3	3.4	.....	4.5	3.8	2.7	2.5	3.6	2.6	3.0
30	.....	.....	3.2	3.6	.....	4.3	3.8	2.7	2.5	3.5	2.6	2.8
31	.....	.....	3.2	.....	.....	.....	3.6	2.6	.....	3.4	.....	2.8

Daily gage height, in feet, of Toccoa River near Blueridge.—Continued.

Day	Jan.	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1901												
1	3.0	3.0	3.0	4.0	3.6	4.0	3.0	3.5	4.0	3.2	2.8	2.8
2	3.0	3.0	3.0	4.0	3.6	4.0	3.0	3.2	4.0	3.0	2.8	2.8
3	3.0	4.0	3.0	4.0	3.5	4.0	3.0	3.0	4.0	3.0	2.7	2.8
4	3.0	4.0	3.0	4.0	3.5	4.0	3.0	3.0	4.0	3.0	2.7	2.8
5	3.0	3.5	3.0	4.0	3.5	3.8	3.0	6.0	4.0	3.0	2.7	2.8
6	3.0	3.5	3.0	4.0	3.5	3.8	3.0	4.0	4.0	3.0	2.7	2.9
7	2.8	3.4	3.0	3.8	3.5	3.6	3.0	4.0	4.0	3.0	2.7	3.0
8	2.8	3.4	3.0	3.8	3.5	3.6	3.0	4.0	4.0	3.0	2.6	3.0
9	3.0	3.0	3.5	3.8	3.4	3.5	3.0	3.5	4.0	3.0	2.6	3.0
10	4.0	3.0	3.4	3.8	3.4	3.5	3.0	3.5	3.6	3.0	2.6	3.0
11	7.4	3.0	3.3	3.7	3.4	3.5	3.0	3.5	3.6	3.0	2.6	4.0
12	5.0	3.0	3.0	3.7	3.2	3.5	3.0	4.0	6.6	3.0	2.6	5.0
13	4.0	3.0	3.0	3.7	3.2	3.5	3.0	4.0	3.6	3.0	2.6	5.0
14	3.8	3.0	3.0	3.6	3.0	3.5	3.0	4.0	3.5	3.0	2.6	12.0
15	3.8	3.0	3.0	3.6	3.0	3.5	3.0	5.0	3.5	3.0	2.6	5.0
16	3.6	3.0	3.0	3.6	3.0	3.4	3.0	5.0	3.5	3.0	2.6	4.8
17	3.6	3.0	3.0	3.5	3.0	3.4	3.0	5.0	3.4	3.0	2.7	4.8
18	3.4	3.0	3.0	3.5	3.0	3.4	4.0	4.5	3.4	2.8	2.7	4.6
19	3.4	3.0	3.0	5.5	3.0	3.2	4.0	4.5	3.0	2.8	2.7	4.6
20	3.2	2.8	3.0	4.5	11.0	3.2	3.5	4.5	3.0	2.8	2.7	4.6
21	3.0	2.8	3.0	4.0	6.0	3.2	3.0	4.0	3.0	2.8	2.7	4.0
22	3.0	2.8	3.0	4.0	6.0	3.2	3.0	14.0	3.0	2.8	2.7	4.0
23	3.0	2.8	3.0	4.0	5.0	3.0	3.0	8.0	3.0	2.8	2.7	4.0
24	3.0	3.0	3.0	4.0	5.0	3.0	3.0	6.0	3.0	2.8	2.7	4.0
25	4.0	3.0	7.0	3.8	5.0	3.0	3.0	5.0	3.0	2.8	2.7	4.0
26	3.5	3.0	6.0	3.8	4.0	3.0	3.0	4.0	3.0	2.8	2.7	5.0
27	3.5	3.0	4.0	3.8	3.6	3.0	3.0	4.0	3.0	2.8	2.7	5.5
28	3.2	3.0	4.0	3.6	3.6	3.0	3.0	4.0	4.0	2.8	2.7	6.0
29	3.2	.....	4.0	3.6	3.6	3.0	3.0	4.0	4.0	2.8	2.7	10.0
30	3.2	.....	4.0	3.6	3.6	3.0	3.0	4.0	3.5	2.8	2.7	6.0
31	3.0	.....	4.0	.....	4.0	.....	4.0	4.0	.....	2.8	.....	5.4
1902												
1	5.0	4.0	4.0	4.8	3.5	2.8	2.5	2.6	2.8	2.5	2.4	3.0
2	5.0	4.0	4.0	4.8	3.5	2.8	2.5	2.6	3.0	2.5	2.4	4.0
3	5.0	4.0	4.0	4.6	3.4	2.8	2.5	2.4	3.0	2.5	2.4	4.0
4	4.6	4.0	4.0	4.6	3.0	2.8	2.5	2.4	3.0	2.5	2.4	4.0
5	4.5	4.0	3.8	4.5	3.0	2.8	2.5	2.4	3.0	2.6	2.4	4.0
6	4.3	4.0	3.8	4.0	3.0	2.8	2.5	2.3	2.8	2.6	2.4	3.5
7	4.0	4.0	3.7	4.0	3.0	2.8	2.5	2.3	2.8	2.6	3.0	3.5
8	4.0	4.0	3.7	4.0	3.0	3.0	2.4	2.3	2.8	2.6	3.0	3.5
9	4.0	4.0	4.0	4.0	3.0	3.0	2.4	2.3	2.6	2.6	3.0	3.0
10	4.0	4.0	6.0	4.8	3.0	3.0	2.4	2.3	2.6	2.6	2.5	3.0
11	4.0	4.0	5.5	4.8	3.0	3.0	2.3	2.3	2.6	2.6	2.5	3.0
12	3.6	4.3	5.5	4.0	3.0	3.0	2.6	2.3	3.0	2.6	2.4	3.0
13	3.6	4.2	5.0	4.0	3.0	3.0	2.4	2.3	3.0	2.6	2.4	3.0
14	3.6	4.0	5.0	3.8	3.0	3.0	2.4	2.3	2.8	2.6	2.4	3.0
15	3.5	4.0	5.0	3.8	3.0	2.8	2.4	2.3	2.8	2.5	2.4	3.0
16	3.5	4.0	5.0	3.8	3.0	2.8	2.4	2.3	2.8	2.5	2.4	3.0
17	3.5	4.0	4.8	3.6	3.0	2.8	2.4	2.2	2.8	2.5	2.4	3.0
18	3.5	4.0	4.8	3.6	3.0	2.8	2.4	2.2	2.8	2.5	2.4	3.0
19	3.5	6.0	4.6	3.6	3.0	2.7	2.4	2.2	2.8	2.5	2.4	3.0
20	3.5	10.0	4.6	3.4	3.0	2.7	2.4	2.2	2.8	2.5	2.4	3.0
21	3.4	5.0	4.3	3.4	3.0	2.7	2.4	2.2	2.8	2.5	2.3	3.5
22	3.4	5.0	4.0	3.4	3.0	2.6	2.4	2.2	2.7	2.5	2.3	3.5
23	3.4	5.0	4.0	3.4	3.0	2.6	2.4	2.2	2.7	2.5	2.3	3.5
24	3.4	4.0	4.0	3.2	3.0	2.5	2.4	2.2	2.6	2.5	2.3	3.2
25	3.4	4.0	4.0	3.2	3.0	2.5	2.4	2.2	2.6	2.5	4.0	3.0
26	4.0	4.0	4.0	3.2	3.0	2.5	2.4	2.2	2.6	2.4	3.0	3.0
27	4.0	4.0	4.0	3.4	3.0	2.5	2.4	3.0	2.6	2.4	3.0	3.0
28	5.0	4.0	3.8	3.4	3.0	2.5	2.4	3.0	2.5	2.4	3.0	3.0
29	5.0	.....	6.0	3.4	2.8	2.5	2.4	3.0	2.5	2.4	3.0	3.0
30	4.5	.....	5.0	3.5	2.8	2.5	2.4	2.8	2.5	2.4	3.0	3.0
31	4.5	.....	5.0	.....	2.8	.....	2.6	2.8	.....	2.4	.....	3.0

Daily gage height, in feet, of Toccoa River near Blueridge.—Continued.

Day	Jan.	Feb.	Mar.	Day	Jan.	Feb.	Mar.	Day	Jan.	Feb.	Mar.
1903				1903				1903			
1	3.0	3.0	6.0	12	2.8	3.8	4.0	22	3.0	3.8	4.0
2	3.0	3.0	5.0	13	2.8	3.6	4.0	23	3.0	3.8	4.0
3	3.5	4.0	5.0	14	2.8	3.6	4.0	24	3.0	3.8	4.0
4	3.0	5.0	5.0	15	2.8	4.0	4.0	25	3.0	3.8	4.0
5	3.0	4.0	4.8	16	2.8	4.0	4.0	26	3.0	3.6	4.0
6	2.8	4.0	4.8	17	2.8	4.0	4.0	27	3.0	3.6	3.8
7	2.8	4.0	4.6	18	2.8	4.0	4.0	28	3.0	10.0	3.8
8	2.8	3.0	4.5	19	2.8	3.8	4.0	29	3.0	.....	4.0
9	2.8	4.0	4.5	20	3.0	3.8	4.0	30	3.0	.....	7.0
10	2.8	4.0	4.2	21	3.0	3.8	4.0	31	3.0	.....	6.0
11	2.8	3.8	4.2								

Rating tables for Toccoa River near Blueridge.

NOVEMBER 25, 1898, TO DECEMBER 31, 1899.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.90	230	3.40	1,064	4.90	2,204	6 80	3,648
2.00	255	3.50	1,140	5.00	2,280	7.00	3,800
2.10	280	3.60	1,216	5.10	2,356	7.20	3,952
2.20	305	3.70	1,292	5.20	2,432	7.40	4,104
2.30	335	3.80	1,368	5.30	2,508	7.60	4,256
2.40	370	3.90	1,444	5.40	2,584	7.80	4,408
2.50	420	4.00	1,520	5.50	2,660	8.00	4,560
2.60	475	4.10	1,596	5.60	2,736	8.20	4,712
2.70	540	4.20	1,672	5.70	2,812	8.40	4,864
2.80	610	4.30	1,748	5.80	2,888	8.60	5,016
2.90	685	4.40	1,824	5.90	2,964	8.80	5,168
3.00	760	4.50	1,900	6.00	3,040	9.00	5,320
3.10	836	4.60	1,976	6.20	3,192		
3.20	912	4.70	2,052	6.40	3,344		
3.30	988	4.80	2,128	6.60	3,496		

JANUARY 1 TO DECEMBER 31, 1900.[b]

2.50	423	3.80	1,435	5.10	2,735	6.80	4,435
2.60	460	3.90	1,535	5.20	2,835	7.00	4,635
2.70	502	4.00	1,635	5.30	2,935	7.20	4,835
2.80	550	4.10	1,735	5.40	3,035	7.40	5,035
2.90	605	4.20	1,835	5.50	3,135	7.60	5,235
3.00	675	4.30	1,935	5.60	3,235	7.80	5,435
3.10	750	4.40	2,035	5.70	3,335	8.00	5,635
3.20	837	4.50	2,135	5.80	3,435	8.20	5,835
3.30	935	4.60	2,235	5.90	3,535	8.40	6,035
3.40	1,035	4.70	2,335	6.00	3,635	8.60	6,235
3.50	1,135	4.80	2,435	6.20	3,835		
3.60	1,235	4.90	2,535	6.40	4,035		
3.70	1,335	5.00	2,635	6.60	4,235		

JANUARY 1, 1901, TO MARCH 31, 1903.[c]

2.20	270	3.50	1,062	4.80	2,446	7.20	5,014
2.30	312	3.60	1,162	4.90	2,553	7.40	5,228
2.40	355	3.70	1,269	5.00	2,660	7.60	5,442
2.50	400	3.80	1,376	5.20	2,874	7.80	5,656
d 2.60	447	3.90	1,483	5.40	3,088	8.00	5,870
d 2.70	497	4.00	1,590	5.60	3,302	9.00	6,940
d 2.80	550	4.10	1,697	5.80	3,516	10.00	8,010
2.90	606	4.20	1,804	6.00	3,730	11.00	9,080
3.00	666	4.30	1,911	6.20	3,944	12.00	10,150
3.10	732	4.40	2,018	6.40	4.158	13.00	11,220
3.20	804	4.50	2,125	6.60	4,372	14.00	12,290
3.30	883	4.60	2,232	6.80	4,586		
3.40	969	4.70	2,339	7.00	4,800		

a Above gage height 3.00 feet the rating curve is a tangent, the difference being 76 per tenth.
b Above gage height 3.30 feet the rating curve is a tangent, the difference being 100 per tenth.
c Above gage height 3.60 feet the rating curve is a tangent, the difference being 107 per tenth.
d For 1901, 2.60=460, 2.70=503, 2.80=552.

Estimated monthly discharge of Toccoa River near Blueridge.

[Drainage area, 231 square miles]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1898					
November 25–30	1,064	836	988	4.28	0.96
December	1,064	610	745	3.23	3.72
1899					
January	1,520	280	733	3.17	3.66
February	5,244	836	1,759	7.61	7.92
March	3,040	760	1,704	7.38	8.51
April	2,508	760	1,411	6.11	6.81
May	1,292	760	884	3.83	4.41
June	1,064	280	545	2.36	2.63
July	1,444	370	575	2.49	2.87
August	1,064	305	471	2.04	2.36
September	610	255	329	1.42	1.58
October	760	230	298	1.29	1.49
November	912	255	315	1.36	1.52
December 1–23	1,216	255	473	2.05	1.75
1900					
March 23–31	1,235	837	1,035	4.48	1.50
April	1,235	675	878	3.80	4.24
May 1–19	1,235	460	900	3.90	2.76
June 27–30	2,635	1,935	2,335	10.11	1.50
July	1,935	750	1,226	5.31	6.12
August	1,235	460	761	3.29	3.79
September	1,635	423	629	2.72	3.03
October	6,235	423	1,007	4.36	5.03
November	1,035	460	728	3.15	3.51
December	1,235	460	710	3.07	3.54
1901					
January	5,228	552	1,100	4.76	5.49
February	1,590	552	765	3.31	3.44
March	4,800	666	1,077	4.66	5.37
April	3,195	1,062	1,458	6.31	7.04
May	9,080	666	1,599	6.92	7.98
June	1,590	666	1,011	4.38	4.88
July	1,590	666	768	3.32	3.82
August	12,290	666	2,248	9.73	11.22
September	1,590	666	1,144	4.95	5.52
October	804	552	619	2.68	3.09
November	552	460	493	2.13	2.38
December	10,150	552	2,248	9.73	11.22
The year	12,290	460	1,211	5.24	71.45
1902					
January	2,660	969	1,602	6.94	8.00
February	8,010	1,590	2,029	8.78	9.14
March	3,730	1,269	2,104	9.11	10.50
April	2,446	804	1,459	6.32	7.05
May	1,062	550	690	2.99	3.45
June	666	400	530	2.29	2.55
July	447	312	370	1.60	1.84
August	666	270	361	1.56	1.80
September	666	400	531	2.30	2.57
October	447	355	406	1.76	2.03
November	1,590	312	476	2.06	2.30
December	1,590	666	866	3.75	4.32
The year	8,010	270	952	4.12	55.55
1903					
January	1,062	550	626	2.71	3.12
February	8,010	666	1,629	7.05	7.34
March	4,800	1,376	2,046	8.86	10.21

OCOEE RIVER AT M'CAYS, TENN.

This station was established March 21, 1903, by O. P. Hall. It is located at a suspension footbridge just below McCays Ferry, at McCays, Tenn., near the Georgia-Tennessee boundary, and one-half mile below the railroad bridge of the Atlanta, Knoxville and Northern Railroad.

The channel is practically straight for about 800 feet above and below the station. The right bank will overflow at about 14 feet gage height for about 500 feet, and the left bank at a gage height 12 to 20 feet for about 400 feet. The water is confined to one channel and the bed is probably constant. The current is fairly swift and the section is good for measurement. Discharge measurements are made from the suspension footbridge.

The gage is in two sections, the inclined section reading from —0.3 to 8.5 feet, set in a trench and held in place by posts driven into the ground. The vertical section, reading from 8 to 18 feet, is attached to the bridge posts on the right bank. The gage is read twice each day by Arch Ballew. Bench marks are established as follows: (1) The head of a large nail in the center of a post at the right-bank end of the footbridge on the downstream side; elevation, 16.10 feet; this post is an anchor post for the cable of the suspension bridge and may be pulled out of place. (2) A copper plug set in a solid rock at the outer edge of the side ditch of the railroad bed, about 800 feet west of the railroad station at McCays, 11 feet north of the center of the track, and slightly higher than the railroad; elevation, 20.98 feet. Elevations refer to the datum of the gage.

Discharge measurements of Ocoee River at McCays, Tenn.

Date	Gage height	Discharge	Date	Gage height	Discharge
1903	*Feet*	*Sec.-ft.*	1904	*Feet*	*Sec.-ft.*
March 21	3.42	2,063	February 25	1.40	701
May 12	1.87	992	February 26	1.30	669
May 14	1.86	990	May 11	1.33	629
July 24	1.37	727	June 30	.82	386
August 21	1.17	584	August 26	.65	354
October 8	1.22	624	October 10	.30	214
October 9	.85	429			
December 7	.53	307	1905		
			April 10	1.22	666
1904			June 19	1.18	608
February 22	2.80	1,664	October 5	.77	413

Daily gage height, in feet, of Ocoee River at McCays, Tenn.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1	.....	.....	.....	3.7	2.3	2.7	1.6	1.4	0.8	0.6	0.7	0.6
2	.....	.....	.....	3.5	2.3	3.9	1.6	1.3	.8	.6	.7	.6
3	.....	.....	.....	3.3	2.2	2.8	1.6	1.6	.9	.6	.9	.5
4	.....	.....	.....	3.6	2.2	2.7	1.7	1.2	.9	.6	.9	.5
5	.....	.....	.....	3.1	2.1	4.3	1.5	1.4	.9	.6	1.2	.6
6	.....	.....	.....	3.1	2.1	4.1	1.5	1.3	.8	.6	.9	.6
7	.....	.....	.....	3.0	2.1	3.1	1.6	1.2	.8	.6	.8	.5
8	.....	.....	.....	4.4	2.0	2.6	1.6	1.1	.8	1.5	.7	.5
9	.....	.....	.....	3.2	2.0	2.4	1.5	1.1	.9	.9	.7	.5
10	.....	.....	.....	3.1	2.0	2.3	1.6	1.1	.9	.7	.6	.6
11	.....	.....	.....	2.9	2.0	2.8	2.3	1.6	.8	.7	.6	.6
12	.....	.....	.....	2.8	1.9	2.3	1.8	1.1	.8	.7	.9	.5
13	.....	.....	.....	3.3	1.9	2.2	6.3	1.1	.7	.6	.7	.7
14	.....	.....	.....	3.1	1.9	2.1	2.6	1.0	.7	.6	.7	.8
15	.....	.....	.....	3.5	1.9	2.0	1.9	1.8	1.0	.6	.7	.6
16	.....	.....	.....	3.2	1.8	2.0	1.7	1.9	1.3	.6	.7	.5
17	.....	.....	.....	3.1	1.7	1.8	1.8	1.3	1.0	.9	1.2	.5
18	.....	.....	.....	3.1	1.7	1.8	1.6	1.9	.9	.9	1.2	.5
19	.....	.....	.....	2.9	1.7	1.7	1.5	1.2	.8	.7	.8	.5
20	.....	.....	.....	3.1	1.7	1.7	1.5	2.4	.8	.7	.8	.9
21	.....	.....	.....	2.9	1.7	1.7	1.4	1.2	.8	.6	.7	.9
22	.....	.....	4.3	2.7	1.6	1.7	1.4	1.1	.8	.6	.7	.8
23	.....	.....	5.0	2.6	1.6	1.7	1.4	1.1	.7	.6	.7	.6
24	.....	.....	4.6	2.5	1.6	1.6	1.4	1.0	.7	.6	.7	.6
25	.....	.....	3.7	2.5	1.5	1.6	1.3	1.0	.7	.6	.6	.6
26	.....	.....	3.5	2.6	1.5	1.8	1.3	1.0	.7	.6	.6	.7
27	.....	.....	3.3	2.5	1.5	2.2	1.3	.9	.7	.6	.6	.7
28	.....	.....	3.2	2.4	1.5	2.6	1.3	.9	.7	.6	.6	.6
29	.....	.....	3.4	2.3	1.5	1.8	1.2	.9	.7	.6	.6	.7
30	.....	.....	6.4	2.3	1.3	1.6	1.4	.9	.6	.6	.6	.7
31	.....	.....	4.3	.....	1.9	.....	1.7	.9	.....	.7	.....	.6
1904												
1	0.6	0.9	1.1	1.5	1.2	1.45	.75	1.6	.6	.3	.3	.6
2	.6	.8	1.2	1.5	1.25	1.2	.7	.95	.55	.3	.3	.85
3	.7	.9	1.2	1.4	1.25	1.0	.7	.75	.55	.35	.4	1.05
4	.6	.9	1.2	1.35	1.3	1.0	.65	.75	.55	.35	.5	.6
5	.6	.8	1.0	1.3	1.2	.9	.9	1.0	.7	.3	.5	1.35
6	.6	.8	1.0	1.35	1.1	.9	.8	.95	.6	.3	.4	1.4
7	.7	.8	3.0	1.9	1.1	2.1	.7	1.1	.5	.3	.35	.75
8	.6	1.8	2.0	2.3	1.95	1.2	.75	1.7	.5	.3	.3	.6
9	.6	.9	1.6	2.1	1.8	.9	.9	1.25	.5	.3	.3	.5
10	.6	1.0	1.5	1.7	1.45	.9	.75	1.05	.5	.3	.3	.6
11	.8	1.2	1.6	1.65	1.3	.85	.7	1.45	.45	.3	.3	.55
12	.7	1.0	1.45	1.55	1.25	.9	1.2	1.1	.45	.3	.35	.5
13	.7	.9	1.3	1.5	1.2	.85	1.0	1.2	.45	.3	.55	.5
14	.7	.9	2.35	1.4	1.2	.8	.75	.95	.45	.3	.55	.4
15	.7	1.0	1.35	1.4	1.2	.8	.65	1.0	.4	.25	.5	.45
16	.7	.9	1.4	1.4	1.15	.75	.75	.85	.4	.25	.45	.4
17	1.3	.9	1.3	1.35	1.1	.75	.8	.75	.4	.25	.35	.55
18	1.0	.8	1.3	1.35	1.1	.7	.6	.7	.4	.25	.3	.5
19	.8	.9	1.3	1.3	1.1	.7	.6	.75	.4	.25	.3	.45
20	.7	2.0	1.3	1.25	1.15	.8	.55	.8	.35	.25	.3	.4
21	.7	2.0	2.25	1.3	1.0	.75	.6	.7	.4	.25	.35	.4
22	1.0	2.9	2.25	1.35	1.0	1.2	1.1	.6	.45	.25	.4	.4
23	1.7	2.2	3.6	1.25	1.0	.8	.75	.6	.4	.25	.65	.4
24	1.4	1.7	2.8	1.2	.9	.7	.7	.75	.35	.25	.4	.45
25	1.2	1.4	2.2	1.2	1.0	.65	.9	.7	.35	.25	.4	.75
26	1.1	1.3	1.95	1.35	.95	.7	.85	.7	.35	.3	.3	.6
27	.9	1.3	2.2	1.5	.9	.7	.65	.95	.35	.3	.3	1.5
28	1.0	1.2	1.85	1.35	.9	.7	1.0	.75	.4	.3	.3	2.25
29	.9	1.1	1.7	1.3	.9	1.2	.75	.65	.35	.3	.3	1.05
30	.9	.....	1.6	1.2	.9	.85	.7	.6	.3	.3	.75	.8
31	.8	.....	1.55	.....	2.35	.....	.75	.6	.....	.3	.....	.7

Daily gage height, in feet, of Ocoee River at McCays, Tenn.—Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	0.7	0.77	1.5	1.3	1.45	1.4	1.7	0.9	0.8	0.92	0.68	0.6
2	.7	.8	1.4	1.2	1.35	1.3	1.25	.82	1.7	.7	.6	.6
3	.7	.8	1.4	1.2	1.3	1.3	1.1	.8	1.1	.88	.6	4.6
4	.7	.75	1.4	1.2	1.5	1.25	1.0	.8	.92	1.2	.65	1.6
5	.63	1.0	1.3	1.4	1.4	1.2	1.0	.8	.8	.78	.62	1.4
6	.8	1.55	1.3	1.45	1.65	1.2	1.0	.75	.8	.68	.63	1.2
7	.5	1.25	1.4	1.4	1.7	1.2	1.0	.9	.8	.6	.62	1.2
8	.9	1.45	1.3	1.3	1.7	1.15	1.15	1.25	.8	.6	.6	3.6
9	.8	3.1	1.7	1.2	1.8	1.1	1.0	1.0	.8	.6	.6	3.4
10	.9	2.45	2.0	1.2	1.55	1.0	1.2	1.15	.72	.8	.6	2.4
11	.95	1.85	1.25	1.2	1.4	1.0	1.5	2.15	.75	3.3	.6	1.9
12	6.4	1.65	1.5	1.7	1.35	1.15	4.4	1.75	1.15	1.35	.6	1.65
13	3.5	1.7	1.55	1.35	1.3	1.1	2.0	1.65	.8	.95	.6	1.5
14	2.0	1.85	1.5	1.2	1.2	1.0	1.5	1.8	.73	.8	.6	1.55
15	1.1	1.75	1.4	1.35	1.55	1.5	1.3	1.95	.72	.82	.6	1.7
16	1.1	1.5	1.3	1.4	2.8	1.5	1.45	1.45	.72	.9	.6	1.6
17	1.1	1.5	1.3	1.2	1.8	1.65	1.3	1.4	.7	.8	.6	1.45
18	1.0	1.4	1.3	1.2	1.6	1.3	1.15	1.2	.7	.72	.6	1.4
19	1.0	1.3	1.25	1.2	1.5	1.3	1.4	1.1	.65	.68	.55	1.35
20	1.0	4.2	1.7	1.15	1.5	1.1	1.2	1.0	.7	.6	.8	1.7
21	.98	4.1	3.0	1.15	1.45	1.4	1.1	1.0	.7	.65	.75	2.7
22	.93	3.3	1.95	1.25	1.4	1.25	1.1	1.0	.62	.62	.6	2.0
23	.9	2.25	1.7	1.1	3.0	1.85	1.0	1.1	.6	.65	.6	2.2
24	.83	2.15	1.7	1.1	2.2	1.25	1.0	1.1	.6	.6	.72	2.0
25	.8	2.0	1.6	1.1	1.85	1.2	1.05	1.15	.6	.7	.7	1.75
26	.8	1.85	1.5	1.25	1.8	1.15	.95	1.4	.6	1.2	.62	1.6
27	.75	1.65	1.4	1.7	1.7	1.3	.9	1.0	.55	.85	.62	1.55
28	1.1	1.55	1.4	1.45	1.6	1.5	.9	.95	.55	.75	.6	1.5
29	1.1	.....	1.35	1.5	1.5	1.8	2.15	.85	.55	.7	.65	1.7
30	.9	.....	1.45	1.85	1.45	1.65	1.0	.8	.58	.7	.75	1.5
31	.85	.....	1.3	.....	1.5	.....	1.0	.8	.....	.7	.....	1.45

Rating table for Ocoee River at McCays, Tenn., from March 20, 1903, to December 31, 1905.[a]

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.20	200	1.30	655	2.30	1,275	3.60	2,200
.30	230	1.40	710	2.40	1,340	3.80	2,350
.40	262	1.50	767	2.50	1,410	4.00	2,500
.50	296	1.60	826	2.60	1,480	4.20	2,650
.60	332	1.70	887	2.70	1,550	4.40	2,800
.70	370	1.80	950	2.80	1,620	4.60	2,950
.80	411	1.90	1,015	2.90	1,690	4.80	3,100
.90	455	2.00	1,080	3.00	1,760	5.00	3,250
1.00	502	2.10	1,145	3.20	1,900	5.50	3,650
1.10	551	2.20	1,210	3.40	2,050	6.00	4,050
1.20	602						

a This table is based on 18 discharge measurements made during 1903-1905. It is well defined between gage heights 0.25 foot and 3.4 feet.

Rating table for Ocoee River at McCays, Tenn., for 1906.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.20	640	2.30	1,315	3.40	2,075	5.00	3,360
1.30	695	2.40	1,380	3.50	2,150	5.20	3,540
1.40	750	2.50	1,445	3.60	2,225	5.40	3,730
1.50	810	2.60	1,510	3.70	2,300	5.60	3,930
1.60	870	2.70	1,580	3.80	2,375	5.80	4,130
1.70	930	2.80	1,650	3.90	2,450	6.00	4,330
1.80	990	2.90	1,720	4.00	2,530	6.20	4,530
1.90	1,055	3.00	1,790	4.20	2,690	6.40	4,740
2.00	1,120	3.10	1,860	4.40	2,850	6.60	4,960
2.10	1,185	3.20	1,930	4.60	3,015	6.80	5,180
2.20	1,250	3.30	2,000	4.80	3,185	7.00	5,400

NOTE.—The above table is applicable only for open-channel conditions. It is based on 4 discharge measurements made during 1906 and on the general form of the earlier curves. It is well defined between gage height 1.0 foot and 3.5 feet. Above gage height 6.5 feet the rating curve is a tangent, the difference being 110 per tenth.

Estimated monthly discharge of Ocoee River at McCays, Tenn.

[Drainage area, 374 square miles.]

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1903					
March 22-31	4,370	1,900	2,634	7.05	0.787
April	2,800	1,275	1,772	4.74	5.29
May	1,275	767	982	2.63	3.03
June	2,725	826	1,306	3.49	3.89
July	4,290	602	936	2.50	2.88
August	1,340	455	642	1.72	1.98
September	655	332	419	1.12	1.25
October	767	332	365	.976	1.13
November	602	332	398	1.06	1.18
December	455	297	340	.909	1.05
1904					
January	887	332	435	1.16	1.34
February	1,690	411	630	1.68	1.81
March	2,200	502	922	2.47	2.85
April	1,275	602	745	1.99	2.22
May	1,308	455	610	1.63	1.88
June	1,145	351	475	1.27	1.42
July	602	314	403	1.08	1.24
August	887	332	470	1.26	1.45
September	370	230	279	.746	.832
October	246	215	226	.604	.696
November	390	230	261	.698	.779
December	1,242	262	407	1.09	1.26
The year	2,200	215	488	1.31	17.78
1905					
January	4,370	296	649	1.74	2.01
February	2,650	390	1,012	2.71	2.82
March	1,760	628	786	2.10	2.42
April	982	551	663	1.77	1.98
May	1,760	602	859	2.30	2.65
June	982	502	661	1.77	1.98
July	2,800	455	687	1.84	2.12
August	1,178	390	592	1.58	1.82
September	887	314	401	1.07	1.19
October	1,975	332	459	1.23	1.42
November	411	314	344	.920	1.03
December	2,950	332	991	2.65	3.06
The year	4,370	296	675	1.81	24.50

Estimated monthly discharge of Ocoee River at McCays, Tenn.—Continued.

Month	Discharge in second-feet			Run-off	
	Maximum	Minimum	Mean	Sec.-ft. per sq. mile	Depth in inches
1906					
January	4,850	695	1,450	3.88	4.47
February	1,180	750	898	2.40	2.50
March	3,180	810	1,280	3.42	3.94
April	1,720	900	1,160	3.10	3.46
May	1,150	640	858	2.28	2.63
June	2,530	722	1,050	2.81	3.14
July	2,850	695	1,300	3.48	4.01
August	2,220	900	1,170	3.13	3.61
September	3,020	810	1,200	3.21	3.58
October	2,340	870	1,330	3.56	4.10
November	18,000	750	1,920	5.13	5.72
December	2,850	980	1,180	3.16	3.64
The year	18,000	640	1,230	3.29	44.80

NOTE.—Values for 1906 are excellent

FIGHTINGTOWN CREEK AT M'CAYS, TENN.

This station was established August 27, 1904, for the purpose of making miscellaneous measurements. It is located about one-half mile above the mouth of the creek, which flows into Ocoee River about one-half mile below the gaging station at McCays, Tenn. Fightingtown Creek is in Georgia, but its mouth is in Tennessee.

Both banks are open cultivated lands, which will probably overflow. The bed is sandy, and will probably change much. Discharge measurements are made by means of a boat or by wading. The bench mark is two small nails driven into the largest of a cluster of small maple sprouts on the right bank, 40 feet above the mouth of a small branch; elevation, 5.00 feet above datum of assumed gage.

Discharge measurements of Fightingtown Creek at McCays, Tenn.

Date	Gage height	Discharge	Date	Gage height	Discharge
1904	*Feet*	*Sec.-ft.*	1905	*Feet*	*Sec.-ft.*
May 12	a 1.25	122	June 20	2.00	123
August 27	1.72	79	October 6	1.61	59
October 11	1.12	40			

a Gage height given is for the Ocoee River at McCays.

MISCELLANEOUS MEASUREMENTS, HIWASSEE RIVER DRAINAGE BASIN IN GEORGIA

Fightingtown Creek.—This stream is a tributary of Toccoa River. A measurement was made October 4, 1904, at the Galloway bridge, near Blueridge, above Horseshoe Bend.

Width, 33 feet; area, 25 square feet; mean velocity, 1 foot per second; discharge, 25 second-feet.

Toccoa River.—This stream is a tributary of Hiwassee River, its name becoming Ocoee River in the State of Tennessee. A measurement was made October 3, 1904, from a small boat at Bench Leg Ford, near Blueridge, 1 mile below the Morganton road bridge, and one-fourth mile below the mouth of Weaver Creek.

Width, 110 feet; area, 264 square feet; mean velocity, 0.65 foot per second; discharge, 172 second-feet.

RIVER SURVEYS IN HIWASSEE RIVER DRAINAGE BASIN

HIWASSEE RIVER

The elevations in the following list are based on an aluminum tablet marked "1984 ATLANTA" at the northeast corner of front vestibule of Towns County court-house, Hiwassee, the elevation of which is accepted as 1,983.634 feet above sea level.

The leveling is adjusted with flying levels on Nottely River to accord with the 1903 adjusted elevation of the primary bench marks at Blairsville and Hiwassee. From the mouth of the Nottely to Apalachia the leveling is a single spur line.

The leveling was done in 1903 by Thomas B. O'Hagan, levelman, under the direction of Carroll Caldwell, field assistant, United States Geological Survey.

Elevations on Hiwassee River from Hiwassee, Ga., to Apalachia, N. C.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Hiwassee, Towns County court-house, at northeast corner of front vestibule, aluminum tablet marked "ATLANTA 1934"	1,963.634
0.3	Hiddon Bridge, 300 ft. north, edge of county road, white oak tree, nail in west side	1,882.30
0.3	Hiddon Bridge, 300 feet north of, water surface	1,865
0.3	High-water mark	1,882
0.3	Bridge, water surface	1,881
0.8	Town Branch, mouth, water surface	1,862
1.6	25 feet north of bridge, 20 feet west of river, point on rock bluff	1,871.36
1.6	Bridge, water surface	1,857
1.6	Bridge floor	1,874.8
1.6	High-water mark	1,876
1.7	Hog Creek, water surface	1,855
1.9	Small rapids, water surface	1,854
2.2	Bells Creek, 900 feet north, on east side of river, triple maple tree, nail in side of	1,854.14
2.2	Bells Creek, mouth of, water surface	1,853
2.3	Small falls, head, water surface	1,851
2.3	Small falls, foot, water surface	1,847
2.8	Water surface	1,838
3.4	Sally Ford, mouth, water surface	1,836
3.6	Hog Creek, mouth, water surface	1,833
3.7	Water surface	1,830
3.8	Gibson Creek, mouth, water surface	1,829
4.8	Long Bullet Creek, mouth, water surface	1,825
4.8	Pendleton Ford, 25 feet northwest, nail in side of dead stump	1,838.2
4.8	Pendleton Ford, water surface	1,823
4.8	High-water mark	1,835
5.2	Sneaking Creek, mouth, water surface	1,820
5.5	Water surface	1,819
5.6	Ford, 75 feet northwest, 10 feet west of road, nail in red-oak tree	1,830.62
6.1	15 feet north of river, point on rock	1,824.63
6.2	Water surface	1,811
6.4	Stream, mouth, water surface	1,809
6.4	Rough ford, 15 feet north of river, rock bluff, point on rock	1,816.84
6.9	Water surface	1,807
7.2	Shooting Creek, mouth, water surface	1,804
7.9	Barnard Bridge, northeast abutment, point on top	1,818.31
7.9	Barnard Bridge, water surface	1,797
7.9	Barnard Bridge, bridge floor	1,819.7
7.9	Barnard Bridge, high-water mark	1,814
8.3	Ford, water surface	1,794
8.3	Ford, 50 feet south of ford, 15 feet north of river, nail in side of dogwood tree	1,807.89
8.8	Water surface	1,790
9.0	Head of island, water surface	1,789
9.2	Hyatts Mill Creek, mouth, water surface	1,787
9.4	Herbert Ford, on south edge of river at, nail in side of birch tree	1,791.19
9.4	High water mark	1,799
9.4	Water surface	1,787
.....	Blair Creek, mouth, water surface	1,787
10.0	12 feet west of river, point on rock	1,796.74
10.0	Water surface	1,782
10.8	Town Creek, mouth, water surface	1,778
11.5	Tusquite Bridge, 250 feet west, on edge of river, nail in root of birch tree	1,778.9
11.5	Tusquite Bridge, water surface	1,774
11.5	High-water mark	1,794
11.8	Martin or Quail Creek, mouth, water surface	1,774
12.2	Water surface	1,773
12.6	Tusquite Creek, mouth, 150 feet northwest, 10 feet west of river, nail in root of birch tree	1,777.98
12.6	Water surface	1,771
12.8	Rapids, water surface	1,767
13.3	Below rapids, water surface	1,760
13.6	Stream, mouth, water surface	1,759
14.0	Martin Ford, 125 feet south, on west edge of river, at fish trap, nail in root of birch	1,757.74
14.0	Martin Ford, water surface	1,756
14.8	Water surface	1,742
14.9	Leatherwood Ford, 25 feet northwest, nail in walnut tree	1,749.19
14.9	Leatherwood Ford, water surface	1,741
16.0	Allbon Creek, mouth, water surface	1,741
16.4	Water surface	1,722
17.0	Fire Creek, mouth, water surface	1,712
17.3	Stream, mouth, water surface	1,708
17.5	Passamore Ford, east side of river, in center of ford road, nail in root of gum tree	1,709.84
17.5	Passamore Ford, water surface	1,707
17.7	Cloud Fire Creek, mouth, water surface	1,709

Elevations on Hiwassee River from Hiwassee, Ga., to Apalachia, N. C.—Con'd.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
18.3	Water surface	1,690
18.8	Betty Creek, mouth, water surface	1,685
19.1	Head of island, water surface	1,679
19.4	Sweetwater Creek, mouth, water surface	1,673
19.6	Stream, mouth, water surface	1,668
20.0	Shallow Ford, 15 feet east of river, nail in side of birch tree	1,667.14
20.0	Water surface	1,663
20.5	Water surface	1,659
20.9	End of island	1,649
21.0	Creek, mouth	1,642
21.4	Water surface	1,632
21.5	Water surface	1,629
21.8	Backwater of Cherokee dam, 1,500 feet from, at small rapids, water surface	1,624
22.0	Top of Cherokee dam, water surface	1,625
22.0	Foot of Cherokee dam, water surface	1,614
22.0	Cherokee dam, 25 feet southwest, point on rock	1,616.59
22.0	Water surface	1,609
22.2	Canewater Ford water surface	1,606
24.0	Rocky Branch, mouth, water surface	1,591.4
24.0	North edge of river, nail in side of birch tree	1,594.79
24.1	Small rapids, foot, water surface	1,590
24.7	Stream mouth, water surface	1,586
25.2	Brasstown Creek, mouth, water surface	1,576
26.2	Island Ford, 700 feet east, south side of river, point on rock	1,666.56
27.6	Peachtree Creek, mouth, water surface	1,550
28.0	Horseshoe Ford, water surface	1,549
28.0	South side of ford, nail in side of beech tree	1,553.06
29.5	20 feet north of river, north side of road, point on rock	1,548.7
29.9	Scott Branch, mouth, water surface	1,539
30.4	Stream, mouth, water surface	1,529
31.3	Martins Creek, mouth, water surface	1,520
31.6	Twin beech tree, nail in root	1,518.12
31.8	Stream, mouth, water surface	1,518
32.1	Murphy, N. C., iron bridge, south abutment, point on rock	1,518.3
32.1	Murphy, N C., iron bridge, water surface	1,512
32.1	Bridge floor	1,531.9
32.1	High-water mark	1,529
32.5	Valley River, mouth, west shore, 20 feet north of, in water, point on rock	1,506.85
32.5	Water surface	1,506
34.0	Water surface	1,491
34.9	Laurel Creek, mouth, water surface	1,474
35.3	Johnson Ford, 8 feet south of river, nail in root of large birch tree	1,471.95
35.3	Johnson Ford, water surface	1,469
35.3	High-water mark	1,481
35.9	Hangingdog Creek, mouth, water surface	1,462
36.5	Water surface	1,459
37.0	Nottely River, mouth, water surface	1,455
37.0	Island projecting between the two rivers, nail in root of birch tree	1,459.4
37.0	Nottely River, mouth south side, nail in root of willow tree	1,456.93
38.0	Small rapids, water surface	1,448
39.0	Beech Creek, water surface	1,438
40.5	Ford, water surface	1,425
40.5	Shallow ford, 40 feet southwest, honey bee tree, nail in root	1,431.59
41.2	Water surface	1,418
42.0	Grape Creek, mouth, water surface	1,416
42.5	Small shoals, head, water surface	1,415
42.5	Foot of small shoals, water surface	1,410
42.9	Water surface	1,406
44.1	Persimmon Creek, mouth, water surface	1,391
44.8	Foot of large shoals, point on rock	1,390.24
44.8	Water surface	1,381
45.0	Head of small shoals	1,379
46.2	Dennest Creek, mouth, water surface	1,365
46.9	Point on rock	1,363.58
48.0	Shoals, water surface	1,346
48.8	Robertson Ferry, 100 feet below, point on rock	1,344.23
48.8	Robertson Ferry, water surface	1,343
49.9	Shoals, water surface	1,340
50.4	Creek, mouth, water surface	1,332
50.6	Water surface	1,329
51.2	Chamber Creek, mouth, water surface	1,324
51.2	20 feet north of bank, point on rock	1,327.94
51.8	Opposite island, water surface	1,318
52.5	Beaverdam Creek, mouth, water surface	1,304

Elevations on Hiwassee River from Hiwassee, Ga., to Apalachia, N. C.—Con'd.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
53.0	Opposite island, water surface	1,296
53.9	Laurel Creek, mouth, water surface	1,290
54.3	Shoals, water surface	1,285
54.3	Foot of shoals, water surface	1,277
54.8	Water surface	1,269
55.2	Rapids, water surface	1,259
56.9	Anderson Creek, mouth, water surface	1,248
57.9	Water surface (15 feet above low water)	1,240
58.5	Shallow ford, 40 feet south, nail in root of gum tree	1,239.67
58.5	Water surface	1,234
58.5	High-water mark	1,241
58.6	Foot of small shoals, water surface	1,227
58.9	Shoals Creek, mouth, water surface	1,227
59.7	Foot of small rapids, water surface	1,218
60.9	Stream, mouth, water surface	1,198
61.1	Cane Creek, mouth, water surface	1,195
63.0	Water surface	1,178
64.2	Camp Creek, mouth, water surface	1,175
65.0	Kilpatrick Ferry, 12 feet south, willow tree	1,175.14
65.0	Kilpatrick Ferry, water surface	1,172
65.2	Taylor Ferry, 60 feet northwest, edge of bank, point on large rock	1,169.58
65.2	Taylor Ferry, water surface	1,166
66.8	Apalachia, N. C., Sugar Creek, mouth, 100 feet from post-office, 5 feet north of bank of river, triple willow tree	1,161.58
66.8	Apalachia, N. C., water surface	1,158.2
66.8	High-water mark	1,168

SURVEY OF NOTTELY RIVER

The elevations in the following list are based upon a bronze tablet marked "1892 ATLANTA" in the foundation wall at the northwest corner of Union County Court-House, Blairsville, the elevation of which is accepted as 1,891.536 feet above mean sea level. The leveling is adjusted with the Hiwassee River flying levels to accord with the 1903 adjusted elevation of primary bench marks at Blairsville and Hiwassee. The leveling was done in 1903 by Thomas B. O'Hagan, levelman, under the direction of Carroll Caldwell, field assistant, United States Geological Survey.

Elevations on Nottely River from mouth to Blairsville.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Junction of Nottely and Hiwassee rivers, on point of peninsula, nail in side of birch tree	1,459.4
0.0	Water surface	1,454.52
0.3	At lower ford, water surface	1,459
0.3	75 feet north of lower ford, nail in hickory tree	1,466.77
1.0	High-water mark	1,471
1.0	Upper ford, 50 feet south, nail in root of oak tree	1,474.59
1.0	Water surface	1,467
1.3	Water surface	1,477
1.5	Water surface	1,472
1.5	Water surface	1,478
1.8	Deep ford, 25 feet north, nail in root of black oak	1,487.56
1.8	Water surface	1,483
2.0	Water surface	1,489

Elevations on Nottely River from mouth to Blairsville—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
2.3	High water	1,499
2.4	Head of shoals, water surface	1,491
2.6	Water surface (rain during night raised water 1.3 feet, lower water surface 1,492.67)	1,493
2.9	Hall Bridge, 20 feet west, nail in side of apple tree	1,500.2
2.9	Hall Bridge, water surface	1,493
2.9	High water	1,503
4.2	Davis Ford, 20 feet northwest, nail in side of maple tree	1,504.43
4.2	Davis Ford, water surface	1,499
4.9	Surface of water on rock	1,502
5.2	Mouth of Combs Creek, water surface	1,505
5.4	Water surface	1,505
5.5	Hall Ford, north edge of river, nail in side of water birch tree	1,513.02
5.5	Water surface	1,505
5.5	High water	1,521
5.9	Mouth of branch, water surface	1,512
6.0	Water surface	1,521
6.6	Water surface	1,526
6.9	Opposite island, water surface	1,534
7.0	Mouth of Rocky Branch, water surface	1,535
7.1	Near old mill, water surface	1,538
7.5	Water surface	1,542
8.6	Nottely Bridge, 1,800 feet north in old field near barn, nail in side of persimmon tree	1,559.54
8.6	Nottely Bridge, water surface	1,544
8.9	Nottely Bridge, 100 feet west, 5 feet south of road, nail in side of black oak tree	1,560.13
9.6	Water surface	1,547
10.5	Mouth of Johnson Branch, water surface	1,548
10.9	Water surface	1,551
11.5	Jacks Creek, 906 feet south, in bend of river 600 feet west and 600 feet north, in cornfield, nail in root of dead peachtree	1,571.83
11.5	Water surface	1,554
11.7	Water surface	1,555
12.0	Anderson Bridge, 50 feet west, nail in side of sycamore tree	1,565.78
12.0	Anderson Bridge, water surface	1,556
12.0	High water	1,575
12.2	Water surface	1,560
12.9	Mouth of branch, water surface	1,561
13.3	Ford, 20 feet northwest, nail in side of birch stump	1,574.02
13.3	Water surface	1,562
13.3	High water	1,577
14.2	Water surface	1,565
15.1	Water surface	1,568
15.4	Landermilk Ford, 1.4 miles below, opposite old fish dam, 50 feet west of river, near small branch, nail in root of black oak tree	1,586.77
15.4	Water surface	1,573
16.0	Water surface	1,580
16.8	Landermilk Ford, 100 feet southwest, 20 feet north of road, nail in root of apple tree	1,598.19
16.8	Water surface	1,583
16.8	High water	1,599
17.2	Mouth of Butler Creek, water surface	1,585
17.7	Below fish dam, water surface	1,587
17.8	Mouth of Moccasin Creek, water surface	1,588
17.8	Moccasin Creek, 200 feet south, 35 feet east of river, east side of road, nail in root of red oak tree	1,602.87
18.5	Mouth of branch, water surface	1,591
18.6	Mouth of Dooleys Creek, water surface	1,591
18.9	Thompson Bridge, 250 feet south, 100 feet southwest of road, nail in root of red oak tree	1,611.01
18.9	Water surface	1,592
18.9	High water	1,601.58
19.1	Water surface	1,599
19.6	In shoals, water surface	1,611
20.2	Above fish dam, water surface	1,617
20.4	Head of fish dam, water surface	1,619
20.8	Foot of island, in shoals, water surface	1,624
21.0	Water surface	1,630
21.4	Chapman Ford, 150 feet north, 2 feet east of road, nail in root of walnut tree	1,645.81
21.4	Water surface	1,634
21.4	High water	1,644
21.8	Just blow fish dam, water surface	1,638
21.9	Mouth of Camp Creek, water surface	1,639
22.6	Above shoals, water surface	1,652
23.0	Mouth of Weasel Creek, water surface	1,655
23.6	Mouth of branch, water surface	1,656
23.8	In shoals, water surface	1,657

Elevations on Nottely River from mouth to Blairsville—Continued.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
23.8	Chamber Ford, 0.4 mile northwest, northeast side of river, point on edge of rock	1,675.88
24.2	Chamber Ford, 200 feet west, nail in root of walnut tree	1,671.49
24.2	Water surface	1,661
24.2	High water	1,678
25.0	Above small shoals, water surface	1,669
25.2	Chastain Ford, 50 feet west, nail in side of walnut tree	1,683.45
25.2	Water surface	1,669
25.5	Foot of large shoals, water surface	1,675
25.8	Mouth of Ivy Creek, head of shoals, water surface	1,680
26.3	Near house, water surface	1,685
26.6	Majners Ford, 75 feet west, on edge of bank, nail in side of corn-bean tree	1,690.8
26.6	Water surface	1,687
26.8	Meadow Ford, 15 feet north, nail in root of beech tree	1,699.17
26.8	Water surface	1,689
26.8	High water	1,703
27.3	Huggins Ford, 25 feet north, nail in side of corn-bean tree	1,707.82
27.3	Water surface	1,692
27.5	Shoals	1,694
27.8	Water surface	1,696
27.9	Above shoals, water surface	1,696
28.4	Morgan Ford, 40 feet north, red oak tree, water surface	1,714
28.4	Water surface	1,702
29.0	Mouth of Young Cour Creek, water surface	1,699
29.0	Mouth of Castile Creek, water surface	1,709
29.1	Castile Creek, 1,600 feet above, on rock, edge of river, point on rock	1,714.2
29.4	Above rapids, water surface	1,715
30.0	Above fish dam, water surface	1,718
30.3	McBee Ford, 60 feet north, nail in side of red oak tree	1,734.37
30.3	Water surface	1,721
30.8	Above branch, water surface	1,723
31.1	Mouth of Reeses Creek, water surface	1,724
31.4	Youngs Ford, 80 feet southwest, red oak tree	1,741.02
31.4	Water surface	1,727
31.5	Millburn Creek, just below, water surface	1,730
31.9	At canal, foot, water surface	1,732
31.9	Head of canal, water surface	1,735
31.9	Canal cut (cut has a drop of 3.6 feet), 50 feet northeast of river, 15 feet southwest of ford, nail in foot of red oak tree	1,741.26
32.2	Above small rapids, water surface	1,739
33.0	Mouth of Creek, water surface	1,743
33.6	Watkins Bridge, 375 feet above, north edge of river, point on rock	1,747.54
33.6	Water surface	1,747
33.6	Jarrett mill dam, foot of	1,748
33.6	Jarrett mill dam head, (Jarrett mill dam has a drop of 3.79 feet)	1,752
34.5	Reeds Ford, 150 feet east, nail in root of walnut tree	1,766.24
34.5	Water surface	1,755
35.0	Above small rapids, water surface	1,760
35.9	Blairsville Bridge, 100 feet southeast, mouth of Butternut Creek, 15 feet north, nail in side of red oak tree	1,775.94
35.9	Water surface	1,769
35.9	High water	1,783
37.2	Blairsville court-house, Union County, in wall on west side of building, bronze tablet	1,891.536

SURVEY OF TOCCOA RIVER

The elevations in the following list are based upon an aluminum tablet at the Washington street entrance of the State capitol building at Atlanta, marked "1050 M. C.," the elevation of which is now accepted as 1049.546 feet above sea level. They accord with the 1903 adjusted elevations of primary bench marks near Morganton and Shallow Ford. The section, Shallow Ford to McCays Ferry, is a single spur line.

The leveling was done in 1903 by Thomas B. O'Hagan, level-

man, under the direction of Carroll Caldwell, field assistant United States Geological Survey.

Elevations on Toccoa River from Butts Bridge down to the Tennessee line.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
0.0	Morganton (3 miles east of Dial), forks of Morgan and Ellijay road, in large marble rock, copper bolt marked "1981"	1,947.821
1.5	Butts Bridge, east side, nail in top of abutment	1,874.25
1.5	Butts Bridge, water surface	1,858
1.5	High-water mark	1,870
2.0	Pigeon Creek, 550 feet east; north side of road, 60 feet north of river, point on rock	1,858.35
2.0	Mouth of Pigeon Creek, water surface	1,849
2.3	Between rapids, water surface	1,845
2.5	Foot of shoals, water surface	1,840
2.9	Mouth of Weeks Creek, foot of rapids, water surface	1,830
3.1	Dial post-office, Van Zants Bridge, 100 feet north, east side of road, nail in root of red-oak tree	1,844.68
3.1	Water surface	1,828
3.1	High-water mark	1,851
4.0	Mouth of Noontootly Creek, water surface	1,825
4.0	Mouth of branch, water surface	1,821
4.2	Rogers Ford, 50 feet west, nail in root of tree	1,825.14
4.2	Water surface	1,820
4.7	Water surface	1,815
5.1	In rapids water surface	1,813
5.2	Big Creek Ford, 225 feet southeast; 50 feet south of river, nail in root of white-oak tree	1,817.74
5.2	Water surface	1,810
5.2	In rapids, water surface	1,809
5.7	Above rapids, water surface	1,802
5.9	Below fish dam, water surface	1,799
6.1	Head of shoals, water surface	1,795
6.4	Foot of shoals, water surface	1,791
6.4	Water surface	1,790
7.0	Water surface	1,782
7.1	Shallow ford, 1 mile north, north side of road in large rock, copper bolt marked "1859"	1,826.439
	SINGLE FLYING LEVEL SPUR LINE TO M'CAYS FERRY.	
7.1	Below rapids, water surface	1,779
7.6	In rapids, water surface	1,769
8.1	Shallow ford, 100 feet north, nail in root of red oak	1,774.93
8.1	Water surface	1,763
8.1	High-water mark	1,774
8.3	In rapids, water surface	1,758
8.6	Water surface	1,755
8.8	Mouth of Stanley Creek, water surface	1,752
9.1	Rapids, water surface	1,747
9.3	Mouth of stream, water surface	1,743
9.5	Below rapids, water surface	1,738
9.9	Stanley Creek, 1 mile northwest, opposite island, north side of river, point on rock	1,738.77
10.0	In rapids, water surface	1,729
10.2	Opposite falls in river, 50 feet north of first falls, point on large rock	1,744.02
10.2	Head of falls, water surface	1,726
10.2	Foot of falls, water surface	1,719
10.7	Mouth of branch, water surface	1,717
11.0	Below rapids, water surface	1,709
11.2	Mouth of Flat Creek, water surface	1,705
11.5	In rapids, water surface	1,691
11.6	Water surface	1,690
11.8	Head of long shoals, water surface	1,689
11.8	Rock cliff, south side of river, opposite large shoals, point in side of	1,692.11
11.9	Head of island, in shoals, water surface	1,679
12.0	Foot of island, in shoals, water surface	1,677
12.9	In shoals, water surface	1,665
13.3	Foot of large shoals, water surface	1,659
13.4	Below rapids, head of more shoals, water surface	1,656
13.4	In rapids, water surface	1,646
14.0	Foot of shoals, water surface	1,640
14.6	Mouth of Persimmon Creek, water surface	1,633
14.6	Persimmon Creek, 300 feet east; west side of river, nail in root of large dead stump	1,638.06
14.7	Below fish dam, water surface	1,629
15.2	Mouth of stream, water surface	1,624
15.4	Mouth of Wilscot Creek, water surface	1,624
15.8	In shoals, water surface	1,616
16.0	Foot of shoals, water surface	1,609
16.8	In rapids, water surface	1,602

Elevations on Toccoa River from Butts Bridge down to the Tennessee line—Con.

Distance	Description of points	Elevation above sea level
Miles		*Feet*
16.8	Wilscot Creek, 1.5 miles west; rock cliff, 18 feet north of river, point on very large rock	1,608.96
16.9	In shoals, water surface	1,600
17.1	Foot of shoals, water surface	1,596
17.3	Tarpley Ford, water surface	1,593
17.3	Tarpley Ford, 20 feet west of; nail in root of beech tree	1,598.30
17.6	In rapids, water surface	1,589
18.2	Mouth of creek, water surface	1,576
18.3	Water surface	1,571
18.8	Mouth of creek, water surface	1,568
19.0	Mouth of Bullfrog Creek, water surface	1,565
19.6	Water surface	1,559
20.0	Mouth of Charlie Creek, water surface	1,555
20.0	Lovingood Ford, 300 feet northwest, nail in side of walnut tree	1,564.61
20.0	Water surface	1,554
20.0	High-water mark	1,569
21.5	Mouth of Starr Creek, water surface	1,550
21.6	Below fish dam, water surface	1,548
22.0	Mouth of Rogers Branch, water surface	1,574
22.4	Toccoa Bridge, water surface	1,546
22.4	Toccoa Bridge, 10 feet east, nail in root of beech tree	1,557.64
22.9	Mouth of spring stream, water surface	1,540
23.5	Below small rapids, water surface	1,539
23.6	Mouth of Weavers Creek, water surface	1,538
23.9	Benchlog Ford, 20 feet northwest, nail in side of beech tree	1,543.47
23.9	Water surface	1,538
25.2	Large bend in river, water surface	1,528
25.5	Atlanta, Knoxville and Northern Railroad bridge, east side of bridge abutment, point on rock	1,536.79
25.5	Water surface	1,526
25.5	High-water mark	1,541
26.6	Mouth of branch, water surface	1,519
26.8	Harts Ford, 100 feet west, stump on edge of bank at canoe landing, nail in side of	1,521.90
26.8	Water surface	1,516
28.0	Water surface	1,510
28.8	Baker Ford, 100 feet southwest, on edge of bank, nail in side of birch tree	1,515
28.8	Water surface	1,507
29.6	Water surface	1,504
30.0	Bend of river, water surface	1,502
30.2	Water surface	1,498
30.9	Mouth of Sugar Creek, water surface	1,494
30.9	Sugar Creek Railroad bridge abutment, point in center of east side of bridge	1,508.32
31.2	Below Calloway Ford, water surface	1,592
31.5	In shoals, water surface	1,589
32.1	200 feet northwest of ford, 4 feet southeast of Atlanta, Knoxville and Northern Railroad track, nail in side peach tree	1,582.69
32.1	Water surface	1,484
32.5	Canoe landing, water surface	1,479
32.8	Hothouse Creek, mouth of, water surface	1,476
33.7	Foot of small shoals, near island, water surface	1,467
34.0	Mouth of Barker Creek, water surface	1,464
34.5	Kyle post-office, 600 feet east, Atlanta, Knoxville and Northern Railroad bridge over Barkers Creek, on southeast end of end bolt	1,482.43
34.6	Kyle post-office, 40 feet south, in front of Queen Brothers' store, pile supporting platform, nail in top of	1,483.62
34.6	Kyle Ford, water surface	1,463
35.0	Below rapids, water surface	1,458
35.4	Mouth of Wolf Creek, water surface	1,455
35.8	Atlanta, Knoxville and Northern Railroad bridge over Ocoee River, east side of bridge, point on abutment	1,471.98
35.8	Water surface	1,452
36.1	In bend of river, water surface	1,450
36.3	Dillbeck Ford, north edge of river, nail in side of dead birch tree	1,451.87
36.3	Water surface	1,447
37.5	McCays post-office, Polk County, Tenn., rock supporting southwest corner of, point on	1,468.07
37.5	McCays Ferry, north side of river, pile supporting swinging bridge, cartridge shell in top	1,460.15
37.5	Water surface	1,444
37.5	High-water mark	1,469

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